

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

COGMEDIA LLC,

Plaintiff,

v.

META PLATFORMS, INC.,

Defendant.

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CASE NO. 1:25-cv-12127

DEMAND FOR JURY TRIAL

**META PLATFORMS, INC.'S
PRELIMINARY NON-INFRINGEMENT AND INVALIDITY CONTENTIONS**

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I. INTRODUCTION

Defendant Meta Platforms, Inc. (“Meta”) hereby makes the following preliminary disclosure of non-infringement and invalidity contentions (“Preliminary Non-Infringement and Invalidity Contentions”) to Plaintiff Cogmedia LLC (“Cogmedia”).

These contentions address only the claims of U.S. Patent Nos. 9,817,562 (the “’562 Patent”); 10,664,141 (the “’141 Patent”); 11,036,371 (the “’371 Patent”); (collectively, the “Asserted Patents”) asserted in Plaintiff’s Preliminary Disclosure of Asserted Claims and Infringement Contentions (“Infringement Contentions”) served on February 4, 2026. Cogmedia has asserted the following claims (collectively, the “Asserted Claims”) against Meta:

- **The ’562 Patent:** Claims 1, 2, 3, 5, 7, 8, 11, 12, 13, 14, 15, 17, 18.
- **The ’141 Patent:** Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 17, 18, 19, 20, 21, 22.
- **The ’371 Patent:** Claims 1-29.

Meta submits these Preliminary Non-Infringement and Invalidity Contentions without waiving any argument about the sufficiency or substance of Plaintiff’s Infringement Contentions.

In addition, pursuant to Local Rule 16.6(d)(4), and based on its investigation to date, Meta has produced or is producing documents concurrently with these Preliminary Non-Infringement and Invalidity Contentions.

Meta reserves the right to amend these Preliminary Non-Infringement and Invalidity Contentions. The information and documents that Meta produces are based on information available to date and are subject to further revision. Meta expressly reserves the right to amend these disclosures and the accompanying document production should Cogmedia provide any additional information that it failed to provide in its Infringement Contentions.

Further, because discovery (including discovery from third parties) has not yet begun, Meta reserves the right to revise, amend, and/or supplement the information provided herein, including identifying and relying on additional references, should Meta's further search and analysis yield additional information or references, consistent with the Standing Order Governing Patent Cases and the Federal Rules of Civil Procedure. Meta reserves the right to rely on additional prior art, including but not limited to all prior art identified on the face of the asserted patents; further analysis of prior art; application of prior art to new or different claims; depositions and discovery from prior art sources and authors; analysis of prior art products; combinations of references; expert opinion and/or testimony; evidence supporting invalidity of any asserted claim; and any additional relevant information that may result from its further investigation and discovery. Additionally, Meta reserves the right to rely on additional information, testimony, and/or analysis concerning operation of prior art systems. Moreover, Meta reserves the right to revise its ultimate contentions concerning the invalidity of the asserted claims, which may change depending upon the Court's construction of the asserted claims, any findings as to the priority or invention date of the asserted claims, and/or positions that Cogmedia or its expert witness(es) may take concerning claim construction, infringement, and/or invalidity issues.

Prior art not included in this disclosure, whether known or unknown to Meta, may become relevant. In particular, Meta is currently unaware of the extent, if any, to which Cogmedia will contend that limitations of the asserted claims are not disclosed in the prior art identified by Meta, or will contend that any of the identified references do not qualify as prior art. The identification of any patent or patent publication shall be deemed to include any counterpart patent or application filed, published, or issued anywhere in the world.

The information and documents that Meta produces are based on Meta's present understanding of Cogmedia's infringement theories as advanced by Cogmedia in its Infringement Contentions. Cogmedia's Infringement Contentions are deficient in numerous respects. For example, Cogmedia has failed to specifically identify where each element of each Asserted Claim is found within each accused instrumentality, and does not identify a specific mapping from components of the accused instrumentalities to the elements of the asserted claims. Cogmedia has not provided detailed infringement contentions that identify each specific claim limitation allegedly infringed under the doctrine of equivalents and its alleged equivalent element in the accused instrumentalities, or the basis for purported insubstantial differences between each such limitation and its alleged equivalent. If Cogmedia attempts or is permitted to cure such deficiencies, doing so may lead to further grounds for invalidity, and thus Meta specifically reserves the right to modify, amend, or supplement its contentions.

Cogmedia has not produced prior art known to it, including regarding any known prior art products. As discovery in this action provides Meta with additional information, Meta may serve subpoenas on third parties believed to have knowledge, documentation, and/or corroborating evidence relating to invalidity and/or prior art. It is therefore likely that Meta will discover additional prior art pertinent to the invalidity of the asserted claims, and Meta reserves the right to supplement these contentions after becoming aware of additional prior art or information. Meta further reserves the right to introduce and use such supplemental materials at trial.

Meta's claim charts in Appendices A-1 through A-27, B-1 through B-27, and C-1 through C-27 cite particular teachings and disclosures of the prior art as applied to features of the asserted claims. However, persons having ordinary skill in the art may view an item of prior art generally

in the context of other publications, literature, products, and understanding. Accordingly, the cited portions are only exemplary, and Meta reserves the right to rely on uncited portions of the prior art references and on other publications and expert testimony as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that a claim limitation is known or disclosed. Citations to figures are inclusive of all discussions of those figures. Meta further reserves the right to rely on uncited portions of the prior art references, other publications, documents explicitly or implicitly incorporated by reference, and testimony, to establish bases for combinations of certain cited references that render the asserted claims obvious. Further, for any combination, Meta reserves the right to rely additionally on information generally known to those skilled in the art and/or common sense.

The references discussed herein and in the claim charts in Appendices A-1 through A-27, B-1 through B-27, and C-1 through C-27, or elsewhere identified, may disclose the elements of the asserted claims explicitly and/or inherently, and/or they may be relied upon to show the state of the art in the relevant timeframe. The exemplary obviousness combinations are provided in the alternative to Meta's anticipation contentions and are not to be construed to suggest that any reference included in the combinations is not itself anticipatory.

Meta further reserves the right to assert that the asserted claims are invalid under 35 U.S.C. § 102(f) in the event that discovery reveals that the named inventor of the asserted patents did not invent (either alone or in conjunction with others) the subject matter recited in the asserted claims. If Meta asserts invalidity under § 102(f), Meta will provide the name of the person(s) from whom, and the circumstances under which, the invention or any part of it was derived.

Meta further intends to rely on inventor admissions concerning the scope of the asserted claims or of the prior art relevant to the asserted claims found in, *inter alia*, the patent prosecution

history and/or reexamination history for the asserted patents and related patents and/or patent applications; any deposition testimony of a named inventor of the asserted patents; and the papers filed and any evidence submitted by Cogmedia in conjunction with this litigation. Meta reserves the right to contend that the asserted claims are invalid for failure to name the correct inventor(s), and/or to contend that Cogmedia lacks standing to bring this litigation with respect to such patents.

Furthermore, nothing stated herein shall be treated as an admission or suggestion that Meta agrees with Cogmedia regarding either the scope of any asserted claim or the claim constructions Cogmedia advances in its Infringement Contentions or anywhere else. To the extent that Meta's Preliminary Non-Infringement and Invalidity Contentions reflect constructions of claim limitations consistent with or suggested by Cogmedia's Infringement Contentions, no inference is intended nor should any be drawn that Meta agrees with Cogmedia's claim constructions. Meta expressly reserves the right to propose alternative constructions to those that have been or may be advocated by Cogmedia.

Nor shall anything in these Preliminary Non-Infringement and Invalidity Contentions be treated as an admission that Meta's accused products meet any limitation of any asserted claim. Meta denies that it infringes any claim of the asserted patents. To the extent that any prior art reference identified by Meta contains a claim element that is the same as or similar to an element in an accused product, based on a claim construction inferred from Cogmedia's Infringement Contentions, inclusion of that reference in Meta's Preliminary Non-Infringement and Invalidity Contentions shall not be deemed a waiver by Meta of any claim construction or noninfringement position. Meta expressly reserves the right to contest any claim construction asserted by Cogmedia and expressly reserve all noninfringement arguments.

Depending on the Court's construction of the asserted claims of the asserted patents, and/or positions that Cogmedia or its expert witness(es) may take concerning claim interpretation, infringement, and/or invalidity issues, the charted prior art references in Appendices A-1 through A-27, B-1 through B-27, and C-1 through C-27, or otherwise identified herein, may be of greater or lesser relevance, and different combinations of these references may be implicated. Given this uncertainty, the charts may reflect alternative applications of the prior art against the asserted claims. Nothing stated herein shall be construed as an admission or a waiver of any particular construction of any claim term.

It is Cogmedia's burden to show entitlement to its asserted priority dates, and Meta maintains that Cogmedia fails to meet that burden. Cogmedia has not alleged, or produced any evidence to support, earlier dates of conception and actual reduction to practice.

In addition to these Preliminary Non-Infringement and Invalidity Contentions and the prior art identified herein, Meta hereby relies on and incorporates by reference in their entirety and expressly reserves the right to rely upon invalidity contentions and invalidity expert reports (including all invalidity positions, invalidity charts and all prior art cited therein) presented by any present or former Meta employee in any of Cogmedia's or its predecessors' lawsuits or by potential or actual licensees to the asserted patents, including any reexamination or other post-grant review, involving the asserted patents or any related patents (such as patents that claim priority to a common application).

Nothing in Meta's disclosures should be regarded as necessarily reflecting the proper interpretation of the claims or an interpretation of the claims Meta agrees with or proposes. Nothing herein should be construed as an admission that Meta agrees with Cogmedia's implied claim constructions or that Cogmedia has proposed any discernible constructions for claims

and/or claim terms in its Infringement Contentions. Meta disputes Cogmedia's apparent claim interpretations and will propose alternative constructions to those proposed by Cogmedia in its Infringement Contentions at the appropriate time. Nothing herein should be interpreted as reflecting Meta's proposed claim construction positions. Meta expressly reserves the right to propose alternative constructions to those that have been or may be advocated by Cogmedia.

II. NON-INFRINGEMENT DISCLOSURES

Cogmedia's Infringement Contentions fail to demonstrate a plausible basis on which Cogmedia can carry its burden of proof to show that the accused products that Cogmedia has identified—namely, the Facebook application and Facebook website—meet each of the Asserted Claims. In fact, Cogmedia's infringement contentions fail to demonstrate a plausible basis on which Cogmedia can carry its burden even as to *any* single claims. As a threshold, Cogmedia fails to identify what is the “computer” and “software instructions” as recited in every single Asserted Claim. Accordingly, Cogmedia fails to identify how those “software instructions” can be executed to perform the steps recited in the Asserted Claims. Further, Cogmedia fails to map every single limitation to each of the accused products, and instead repeatedly switches between citations to the Facebook application and the Facebook website.

Fundamentally and most importantly, Cogmedia fails to demonstrate how Meta performs each step of the method. To the contrary, Cogmedia admits that certain steps are performed by the user's device. Although Cogmedia states that the steps are performed automatically, Cogmedia admits that the user must perform the action of “posting” under its infringement theory, which is not performed by every user of the Facebook application or Facebook

Detailed charts responding to Cogmedia's infringement contentions is attached as Exhibits 1 to 3 pursuant to Local Rule 16.6(d)(4)(D).

III. PRIOR ART DISCLOSURES

Meta identifies the following prior art references that anticipate and/or render obvious the asserted claims of the asserted patents. The following prior art patents, prior art non-patent publications, and prior art systems/services are prior art under at least 35 U.S.C. §§ 102(a), (b), (e), (f), and/or (g). Whether a prior art reference anticipates or renders obvious the asserted claims may depend upon claim construction. Meta has identified each prior art patent by its inventor, title, number, country of origin, date of filing, date of issue, and, where applicable, the relevant priority date. Each prior art publication is identified by its title, date of publication, and, where feasible, author and publisher. For prior art under 35 U.S.C. § 102(b), Meta has identified the item offered for sale or publicly used or known, the date by which the offer or use took place or the information became known, and the identity of the person or entity which made the use or which made and received the offer, or the person or entity which made the information known or to whom it was made known, to the full extent currently known.

A. Priority Dates

Where the patent-at-issue claims priority through continuations-in-part and the Examiner did not expressly address the priority issue, the burden of production shifts to the patent owner once the petitioner provides invalidating art. *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1305-06 (Fed. Cir. 2008); *Research Corp. Techs. v. Microsoft Corp.*, 627 F.3d 859, 871 (Fed. Cir. 2010).

Cogmedia cannot claim priority simply by referring to a continuous chain of co-pending applications, as listed on the face of the Asserted Patents. *In re NTP*, 654 F.3d 1268, 1276 (Fed. Cir. 2011) (“A patent’s claims are not entitled to an earlier priority date merely because the patentee claims priority.”). “Rather, for a patent’s claims to be entitled to an earlier priority

date, the patentee must demonstrate that the claims meet the requirements of 35 U.S.C. § 120.” *Id.*; see also *Dynamic Drinkware, LLC v. National Graphics, Inc.*, 800 F.3d 1375, 1379-80 (Fed. Cir. 2015) (no presumption that a continuation-in-part is entitled to earlier filing date).

For a claim to be entitled to the benefit of an earlier-filed application, the earlier application must comply with the written description requirement of 35 U.S.C. § 112. See 35 U.S.C. § 120; *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1158 (Fed. Cir. 1998). There must also be a continuity of disclosure: a continuous chain of co-pending applications, each supporting the presently claimed subject matter. *Hollmer v. Harari*, 681 F.3d 1351, 1355 (Fed. Cir. 2012). The relevant inquiry is whether the specification “describe[s] an invention understandable to [a] skilled artisan and show[s] that the inventor actually invented the invention claimed.”

Novozymes A/S v. DuPont Nutrition Biosciences APS, 723 F.3d 1336, 1349 (Fed. Cir. 2013). This requirement is not satisfied by simply making a claim chart matching features to passages in the specification. To “isolate and combine aspects from various embodiments in the specifications (including patents incorporated by referenced involving a different [device])” does not demonstrate that the inventor was in possession of the purported invention. *Purdue Pharma L.P. v. Recro Tech., LLC*, 694 Fed. App’x. 794 (Fed. Cir. 2017). Instead, the written description analysis requires “[t]aking each claim . . . as an integrated whole rather than as a collection of independent limitations.” *Novozymes*, 723 F.3d at 1349.

In addition, pointing to an obvious variation is not enough. “Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed.” *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1571-72 (Fed. Cir. 1997). “One shows that one is ‘in possession’ of the invention by describing the invention, with all its claimed limitations, not that which makes it obvious.” *Lockwood*, 107 F.3d at 1572

(emphasis original).

None of the Asserted Patents cannot properly claim priority to any date prior to September 21, 2009, the filing of date of U.S. Patent No. 8,499,248 (the “’248 Patent”), which shares a common specification with each of the Asserted Patents. Each of the Asserted Patents claims priority through a long chain of continuations through the ’248 Patent. The ’248 Patent is which is a continuation-in-part from U.S. Patent Application No. 11/118,301 (the “’301 Application”) filed on April 29, 2005, which in turn claims priority from U.S. Provisional Application No. 60/566,723 (the “’723 Provisional”) filed on April 29, 2004. The ’248 Patent further claim priority from U.S. Provisional Application No. 61/116,747 (the “’747 Provisional”) filed on November 21, 2008. As set forth below, none of the Asserted Patents can properly claim priority to the ’301 Application, ’723 Provisional, or ’747 Provisional.

’562 Patent: The Asserted Claims of the ’562 Patent require that in the “uniform format” include a “set of indicators,” which further include a “*message indicator that displays a number of instant messages associated with the information object*” and a “*vote indicator that displays a number of votes associated with the information object.*” Neither the ’301 Application, ’723 Provisional, or ’747 Provisional contain any disclosures in their respective specifications to support these claim limitations. For example, while there are references in each of these three specifications to instant messaging generally, there is no disclosure of a “message indicator that displays a *number* of instant messages associated with the information object.” Rather, the ’301 Application specification discloses only the presence or absence of messages and “icon lights,” indicating whether those messages have been read. *See* ’301 Application Specification at 13.

Similarly, the Asserted Claims of the ’562 Patent require a “vote indicator that displays a number of votes associated with the information object. However, neither the ’301 Application

nor '747 Provisional have any disclosure of a “number of votes” associated with an information objected. While the '723 Provisional discloses that “[a]n interaction is registered if a user copies a card, views the content associated with a card, or adds a comment, vote, or notification to a card,” this generic disclosure does not disclose an indicator that “displays a number of votes associated with the information object.” See '723 Provisional Specification at 92. This is not enough, as to show priority requires a showing “that one is ‘in possession’ of the invention by describing the invention, with all its claimed limitations, not that which makes it obvious.” *Lockwood*, 107 F.3d at 1572. In other words, a disclosure that provides “a roadmap” but still “leav[es] it to the . . . industry to complete [the] unfinished invention” lacks sufficient written disclosure support. *Novozymes*, 723 F.3d at 1350. For this reason, the priority chain of the '562 Patent is broken such that it cannot claim priority earlier than September 21, 2009, the filing of date of the '248 Patent.

'141 Patent: The Asserted Claims of the '141 Patent require “*a comment function, by which users having access to the card comment function can exchange comments relating to the card,*” as well as that the “set of indicators,” includes “*an indicator reflecting commenting activity associated with the card.*” However, the '747 Provisional specification does not disclose or provide support for any commenting function or an indicator reflecting commenting activity. In fact the '747 Provisional does not disclose anything related to commenting at all. For this reason, the priority chain of the '141 Patent is broken such that it cannot claim priority earlier than September 21, 2009, the filing of date of the '248 Patent.

'371 Patent: The Asserted Claims of the '371 Patent require “*a comment function, by which users having access to the card comment function can exchange comments relating to the card,*” as well as that the “set of indicators,” includes “*an indicator reflecting commenting*

activity associated with the card.” However, the ’747 Provisional specification does not disclose or provide support for any commenting function or an indicator reflecting commenting activity. In fact, the ’747 Provisional does not disclose anything related to commenting at all. For this reason, the priority chain of the ’371 Patent is broken such that it cannot claim priority earlier than September 21, 2009, the filing of date of the ’248 Patent.

B. Identification of Prior Art

In addition to the references cited on the face of the Asserted Patents and related patents, the admitted prior art references in the specifications of the asserted patents and related patents, the prosecution histories of the asserted patents and related patents, the references cited in any reexaminations, reissue proceedings, or other post-grant proceedings in the U.S. Patent Office of the asserted patents and related patents, and the references cited in any invalidity contentions or expert reports submitted in any action or proceedings involving the asserted patents or related patents, Meta below identifies the following prior art that anticipates each asserted claim or renders it obvious. Meta has set forth in detail in the accompanying claim charts the particular claims that are anticipated under 35 U.S.C. § 102 and/or rendered obvious under 35 U.S.C. § 103 by the particular reference.

1. Prior Art Publications

The patents, patent publications, and non-patent publications produced at Meta-PriorArt_0000001 - Meta-PriorArt_0003271 are prior art to the asserted claims under at least pre-AIA 35 U.S.C. §§ 102(a), (b), (e), and/or (g) and/or pre-AIA 35 U.S.C. § 103.

US7310612	McQueen et. al.	Personalized selection and display of user-supplied content to enhance browsing of electronic catalogs	Filing Date: August 13, 2003 Issue Date: December
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			18, 2007
US20030233422A1	Csaszar et. al.	Method and apparatus for creation, publication and distribution of digital objects through digital networks	Filing Date: June 12, 2003 Publication Date: December 2003
US7080139B1	Briggs et. al.	Method and apparatus for selectively sharing and passively tracking communication device experiences	Filing Date: April 24, 2001 Issue Date: July 18, 2006
US20040137882A1	Forsyth, John Matthew	Group communication method for a wireless communication device	Filing Date: May 2, 2002 Publication Date: July 15, 2004
US6789010	Knapp et. all.	Apparatus for distributing information over a network-based environment, method of distributing information to users, and method of associating content objects with a database wherein the content objects with a database wherein the content objects are accessible over a network communication medium by a user	Filing Date: May 11, 2000 Issue Date: 6,769,010
US20070208802A1	Barman et. al.	Method and system for messaging and communication based on groups	Filing Date: March 2, 2007 Issue Date:

			September 6, 2007
Application 60-542450 of US20050177434A1	Davie, Loren E.	Method for marketing and organization of creative content over an online medium	Filing Date: February 7, 2005 Publication Date: August 11, 2005
US20030236752A1	Dawson et. al.	Method and system for selling goods and/or services over a communication network between multiple users	Filing Date: June 19, 2002 Publication Date: December 25, 2003
US6507865B1	Hanson et. al.	Method and system for group content collaboration	Filing Date: January 14, 2000 Issue Date: January 14, 2003
US20040177319	Horn, Bruce L.	Computer system for automatic organization, indexing and viewing of information from multiple sources	Filing Date: July 16, 2003 Publication Date: September 9, 2004
US20030103603A1	Kurita et. al.	Method for communication	Filing Date: December 4, 2002 Publication Date: June 5, 2003
US6377288	Moran et. al.	Domain objects having computer attribute values for use	Filing Date: January 12,

		in a freeform graphics system	1998 Issue Date: April 23, 2002
US5826263	Nakabayashi et. al.	Data management, display, and retrieval system for a hierarchical collection	Filing Date: October 28, 1996 Issue Date: October 20, 1998
US20080301237A1	Parsons et. al.	Method and apparatus for improved referral to resources and a related social network	Filing Date: May 31, 2007 Publication Date: December 4, 2008
US20020059272A1	Porter, Edward W.	Apparatuses, methods, programming, and propagated signals for creating, editing, organizing and viewing collaborative databases	Filing Date: April 20, 2001 Publication Date: May 16, 2002
US20040030525A1	Robinson et. al.	Method and system for identifying high-quality items	Filing Date: December 19, 2002 Publication Date: February 12, 2004
US20040158455A1	Spivack et. al.	Methods and systems for managing entities in a computing device using semantic objects	Filing Date: November 20, 2003 Publication Date: August 12,

			2004
US20040111467A1	Willis, Brian	User collaboration through discussion forums	Filing Date: August 22, 2003 Publication Date: June 10, 2004
US20040042599A1	Zaner et. al.	Virtual calling card system and method	Filing Date: August 28, 2002 Publication Date: March 4, 2004
US20050261987A1	Bezos et. al.	Notification service for assisting users in selecting items from an electronic catalog	Filing Date: January 30, 2004 Publication Date: November 24, 2005
US20030189592	Boresjo, Dan Peter	Systems and methods for providing self-governing online communities	Filing Date: April 5, 2002 Publication Date: October 9, 2003
US7281215	Canfield et. al.	IM conversation counter and indicator	Filing Date: July 31, 2002 Issue Date: October 9, 2007

US5799318	Cardinal et. al.	Method and apparatus for collecting and displaying information from diverse computer resources	Filing Date: August 8, 1996 Issue Date: August 25, 1998
WO2001001295	Christiansson et. al.	Mobile information service	Issue Date: January 4, 2001
US20030046152	Colas et. al.	Electronic advertisement system and method	Filing Date: August 22, 2001 Publication Date: March 6, 2003
US20020069105	do Rosario Botelho et. al.	Data processing system for targeted content	Filing Date: December 1, 2000 Publication Date: June 6, 2002
US6484149	Jammes et. al.	System and methods for viewing product information, and methods for generating web pages	Filing Date: October 10, 1997 Issue Date: November 19, 2002
US7293074	Jellinek et. al.	Performing server actions using template with field that can be completed without obtaining information from a user	Filing Date: September 19, 2000 Issue Date: November 6, 2007

US5854893	Ludwig et. al.	System for teleconferencing in which collaboration types and participants by names or icons are selected by a participant of the teleconference	Filing Date: June 10, 1996 Issue Date: December 29, 1998
US20040028168	Marcjan, Cezary	Sharing computer objects with associations	Filing Date: June 26, 2003 Publication Date: February 3, 2005
US20040177116	McConn et. al.	Digital image sharing enabled chat application	Filing Date: March 5, 2003 Publication Date: September 9, 2004
WO0199033	Milenkovic et. al.	Communicating objects between users	Publication Date: December 27, 2001
US20030055713A1	Pinto et. al.	System and method for distributing and recording targeted information	Filing Date: September 17, 2001 Issue Date: March 20, 2003
US20050091316	Ponce et. al.	System and method for creating and selective sharing data elements in a peer-to-peer network	Filing Date: October 3, 2003 Publication Date: April 28, 2005
US20030164856	Prager et. al.	Desktop, stream-based, information management system	Filing Date: June 26, 2001

			Publication Date: September 4, 2003
US7136915B2	Rieger, III, Charles J.	System for communicating through maps	Filing Date: December 26, 2001 Issue Date: November 14, 2006
US6453339	Schultz et. al.	System and method of presenting channelized data	Filing Date: January 20, 1999 Issue Date: September 17, 2002
US20020152114	Shumaker et. al.	System and method for updating an intranet portal	Filing Date: April 12, 2001 Publication Date: October 17, 2002
US2002065802	Uchiyama et. al	Distributed monitoring system providing knowledge services	Filing Date: May 30, 2001 Publication Date: May 30, 2002
US20040136510	Vander Veen, Raymond P.	Voice mailbox configuration methods and apparatus for mobile communications devices	Filing Date: November 7, 2003 Publication Date: July 15, 2004

2. Prior Art Systems/Services

The following systems are prior art for the Asserted Claims of the Asserted Patents under at least 35 U.S.C. §§ 102(a), (b) and/or (g):

Konfabulator 1.0.2	Available as of at least March 1, 2003
Sametime	Available as of at least 2002
Keel I	March 26, 1997
Keel II	October 20, 2004
Winston	January 14, 2003
Twine	Available as of at least 2007
Twitter	Available as of at least 2006
Lifestreams	Available as of at least 1997

Meta's investigation into publicly available prior art systems and/or services that include and/or render obvious each element of any asserted claims of the Asserted Patents is ongoing. Fact discovery has not yet begun, and Meta may require discovery from third parties regarding publicly available prior art systems and/or services. Meta reserves the right to amend its identification of prior art systems and/or services as Meta becomes aware of the existence, functionality, and/or characteristics of prior art systems and/or services as a result of its investigation and forthcoming discovery.

Meta's prior art reference charts (attached hereto as Exhibits A-1 through A-27, B-1 through B-27, and C-1 through C-27, referred to herein as "Exhibits A-C") identify where specifically in each item of prior art, each element of each asserted claim is found, citing particular teachings/disclosure of the referenced art as applied to features of the asserted patents. However, persons of skill in the art generally would appreciate an item of prior art in the context

of other publications, literature, products, and understandings. The citations are exemplary and not exclusive, and Meta reserves the right to rely on uncited portions of the prior art references and on other publications and expert testimony as aids in understanding and interpreting the cited portions, as providing context to them, and as additional evidence that the prior art discloses a claimed feature. Meta reserves the right to establish what was known to a person having ordinary skill in the art through other publications, products, and/or testimony. Meta also reserves the right to rely on uncited portions of the prior art references, other publications, and testimony to establish that a person of skill in the art would have been motivated to combine certain of the cited references to render the claims obvious. Where Meta cites a figure or feature reference in an item of prior art, it incorporates by reference the discussion and/or explication of such referenced figure or feature. Meta further reserves the right to supplement its disclosure after it has had the opportunity to investigate Cogmedia's theories of infringement during discovery.

Several of Meta's prior art reference charts, such as described/referenced in Exhibits A-C, include references to certain products, components, systems, and methods that were invented, designed, developed, reduced to practice, and/or in public use or on sale related to a system that was manufactured, imported, sold, and/or offered for sale, that anticipates and/or renders obvious, alone or in combination with other prior art, including the prior art referenced in Exhibits A-C, the Asserted Claims of one or more of the Asserted Patents. The prior art reference charts that refer to system art include references to printed publications that describe the system art. Meta reserves the right to rely on the art charted in Exhibits A-C as printed publication art, system art, or both.

3. EWall Prior Art Publications, Systems, and/or Knowledge

Meta contends that the all Asserted Claims are invalid at least as anticipated or obvious in view of the EWall project and its associated public disclosures (“EWall Project”). The EWall Project was developed at least in part under Grant and/or Contract No. N00014-02-1-0132 and/or N00014-04-1-0569 and/or N00014-08-C-0206 awarded by the Office of Naval Research (“ONR”).

According to named inventor Paul Erich Keel, the EWall Project “is the basis of” the Asserted Patents. *See* May 1, 2017 Declaration of Paul Erich Keel, Ph.D. (submitted in App. No. 15/243,497), p. 2. The EWall Project was described in numerous publicly available prior art documents before the purported priority date of the Asserted Patents, including but not limited to the following (“EWall Documents”):

- EWall: Electronic Card Wall, Patrick Winston et al., Jan. 2004 (“EWall Document 1 (Jan. 2004)”);
- EWall: Electronic Card Wall, Patrick Winston et al., Jan. 2003 (“EWall Document 2 (Jan. 2003)”);
- EWall: Electronic Card Wall, Patrick Winston et al., Jan. 2002;
- EWall: Electronic Card Wall, Patrick Winston et al., Nov. 2000;
- DCODE: Decision Making Constructs in a Distributed Environment, Robert Fleming, Jan. 2003;
- DCODE: Decision Making Constructs in a Distributed Environment, Robert Fleming, Jan. 2004;
- Information Exchange and Display in Asynchronous C2 Group Decision Making. Robert Fleming, Jun. 2003;
- Collaborative Critical Thinking, Jared Freeman et al., Jan. 2003;
- The Process of Achieving Collaborative Knowledge in Asynchronous Collaboration (CASC), Norman Warner et al., Jan. 2004;
- NPS GIGA Lab Testbed for CKM Projects, Alex Bordetsky, Jan 2004;

- *EWall: Electronic Card Wall* (abstract shown in June 1, 2002 screen capture¹ from www.archive.org of web page ewall.mit.edu/abstract/index.html) (“EWall: Electronic Card Wall Introduction”);
- *EWall: Computational Support/or Decision Making in Collaborative Environments* to Winston, et al. (see Aug. 2, 2003 screen capture from www.archive.org of web page www.ai.mit.edu/research/abstracts/abstracts2002/user-interfaces/32winston.pdf) (“EWall: Computational Support/or Decision Making in Collaborative Environments”);
- *News View Examples*: see screen captures taken from www.archive.org for
 - (a) November 16, 2001 of destech.mit.edu/keel/test/news/share.pl (“EWall NewsView Prototype”);
 - (b) April 7, 2003 of ia.eversitas.com; and
 - (c) June 17, 2002 of destech.mit.edu:80/phw/news/news.html (“EWall NewsView Overview”)
- Ewall - Electronic Card Wall Presentation (ONR/MIT/Computer Science AI Lab Design and Computation Group, Jan. 14, 2004 (COG000126-145))
- Ewall Presentation CKM Workshop; Adelphi, Maryland, Jan. 14, 2003 (OG00146-170)
- Ewall Presentation, San Diego ONR, Jan. 15, 2002 (COG000171-000196)
- Ewall Presentation – ONR/Space and Naval Warfare System Commands; Nov. 14, 2000, San Diego, CA (COG00197-204)
- Ewall Paper - Electronic Card Wall – (COG-000205-208)
- EWall: Computational Support for Decision Making in Collaborative Environments - Winston, Porter, Keel, Ackermann, Huang et al (COG-000209-210)
- Ewall Prototype Article; May 2001 (COG-000211-212)
- Computer Supported Decision Making: Enhancing the Architectural Design Process - Research Proposal (COG001841-1845)
- Lab-notes - A Framework for Presenting Knowledge - 10-27-97 - COG001846
- Knowledge Sharing; Netscape screenshot (COG001847)

¹ All capture dates described herein are illustrative, and Meta reserves the right to rely on other capture dates. For example, appears to have captures at least as early as June 6, 2001.

- Ewall Poster; Copyright MIT 1996-2002 (COG001848)
- Process Design Research MIT, Nov. 1996 (COG001849-1866)
- Design Communication in Architectural Practice - MIT Sloan School of Management - Susan Yee and Paul Keel (COG001867-1886)
- Collaborative Design - Course - Jeffrey Huang and Thomas Schroepfer - SP 2002 Harvard Design School - COG-001900-1911
- Hierarchical representation diagrams (COG-001912-13)
- Course Notes (COG-001914-1920)
- Keel PhD Application, Oct. 28, 1996 (COG-001933-1941)
- Current News/EarlyBird - NewsStripe Digital News Board - Keel and Huang, (August 2000 (COG-001942-1952)
- EWall Notes, Feb 21, 2001 (COG-001953)
- Images of Ewall/Current News EarlyBird (COG-001954-1971)
- Keel - "Projects" - DesCom (Web Based Course Management/Databox/NewsStripe EWall Sep 1999-Aug 2000 (COG-001972-002000)
- Agent Mediating Filtering: Generating Coherence in Collaborative Design- Keel Research Proposal - Jan 10, 1999 (COG-002001-2006)
- Pictures / Examples for the above proposal (COG-002007-2019)
- Ewall Project Write-up Outline (COG002020-2024)
- NewsStripe Project Outline (COG002024-2027)
- Ewall pictures and notes (COG-002028-2032)
- eVersitas - Knowledge Sharing and Interactive Learning Experiences - 2002 Huang and Keel (COG002033-2059)
- Ewall Overview / Remote Card Wall - November 1996 (COG-002060-206)
- Research Proposal for the Continuation of the Netgraph and Cardwall Project - Keel Aug 28, 1998 (COG002065-2066)
- Multiple Users, Multiple Views, Simultaneously (COG-002067-2078)

- Ewall diagrams, pictures (COG-002079-2082)
- Ewall Dcode Integration (COG-002083-2094)
- Ewall Electronic Card Wall Poster ONR MIT - 1996-2002 (COG-002095-2103)
- Ewall Research Project Notes (COG-002104-002106)
- Ewall Scenario for 5/27/03 Videotaping (COG-002107-2019)
- Ewall Diagrams and Notes (COG-002110-2334)
- COG-002138 (11-18-96); COG-002141 (10-17-96); COG-002162 (04-20-98); COG-002183 (03-10-99)
- Ewall: Computations Support for Decision Making in Collaborative Environments - Winston, Porter, Keel, Huang, et. al. (COG-002335-2336)
- Office of Naval Research CKM Workshop Jan 14-16, 2003 - Format for Project Summary and Project Presentation - Ewall (COG-002337-2341)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environment - ONR CKM Workshop Jan 13-15 2004 (COG-002342-2350)
- Electronic Card Wall Computational Support for Information Collecting and Brainstorming Research Proposal for the Office of Naval Research Draft. October 7th 1999 (COG002351-2359)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Research Proposal June 11th 2000 Submitted to: IBM Canada Limited (COG-002360-2363)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments White Paper June 4th 2000 Submitted to: The Space and Naval Warfare Systems Center San Diego (COG-002364-2366)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Research Proposal June 11th 2000 Submitted to: The Space and Naval Warfare Systems Center San Diego (COG-002367-2370)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Research Proposal V4.0 December 6th 2000 (C0G-002371-2378)
- Electronic Card Wall Computational Support for Decision Making in Collaborative Environments - Keel Aug, 2000 (COG002379-002387)

- Ewall picture/diagram (COG002388)
- Ewall Research Product (COG-002389-2391)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Research Proposal V4.0 December 6th 2000 (COG-002392-2402)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V5.0 October 9th 2001 (COG-002403-002409)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal February 6th 2002 (COG-002410-002425)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments - Outline (COG-002426)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal February 6th 2002 (COG-002427-2442)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal, January 13th 2003 (COG-002443-2447)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal, January 13th 2003 (COG-002448-2450)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Project Overview, January 13th 2003 (COG002551-2554)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.1 March 17th 2004 (COG002455-2466)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.2 April 1st 2004 (COG002467-2482)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.6 April 16th 2004 (COG002483-2503)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.1 March 12th 2004 (COG002504-2520)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.5 April 16th 2004 (COG002521-2541)

- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.6 April 16th 2004 (COG002542-2562)
- KNOWLEDGE TRADING Computational Support for Individual and Collaborative Sense-Making Activities by Paul Erich Keel - Sep 2004 (COG-002563-2694)
- INNOVATIVE CLAIMS: EWall provides a computational environment for people to rapidly create, collect and organize information (COG-002695-2697)
- KNOWLEDGE TRADING Computational Support for Individual and Collaborative Sense-Making Activities by Paul Erich Keel - Aug 2004 (COG002698-2798)
- RELATING BITS AND PIECES Computational Support for Collaborative Decision-Making in Distributed Environments Paul Keel Dissertation Proposal February 24th, 2003 (COG002799)
- Ewall Modules (COG-002800-2821)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments White Paper V1.0 January 6th 2001 (COG-002822-2843)
- PROCESS AND RELATION ANALYSIS Capturing Architectural Thought - Keel - 1/11/97 (COG-002844-2872)
- Electronic Card Wall Computational Support for Decision Making in Collaborative Environments - Outline - Keel Aug 2000 (COG002873-2877)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments June 8th 2003 Patrick Winston and Paul Keel (COG002878-2880)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments May 24th 2003 Patrick Winston et al (COG002881-2884)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments White Paper V2.0 September 14th 2001 (COG002885-2891)
- Mike Kahan IAP 2002 UROP Patrick Winston, Project Initiator Paul Keel, Project Manager 2/4/02 EWall UROP IAP Final Report (COG002892-2894)

- Mike Kahan Spring 2002 UROP Patrick Winston, Project Initiator Paul Keel, Project Manager 5/19/02 EWall UROP Spring 2002 Final Report (COG002895-2897)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments May 24th 2003 - Winston (COG-002898-2900)
- Current News - EarlyBird Posters/Diagrams, April 16, 2001 (COG002901-2916)
- Revised Requirements 11/4/03 MIT Ewall Requirements for support of CKM Testbed Development (COG002917)
- Ewall Outline (COG002918)
- Ewall Diagrams/pictures (COG002919-2922)
- EWall Proposal October 9th 2001 (COG-002923-2930)
- NewsStripe Digital News Board by Paul Keel, in collaboration with Jeffrey Huang - NewsStripe Paul Keel August 2000 (COG002931-2936)
- Diagram/Notes/Mockups (COG002937-3039)
- Ewall - Electronic Card Wall MIT - Slide Decks (COG-003040-3092)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Research Proposal June 4th 2000 (COG003093-3095)
- Ewall Diagram/Notes/Mockups (COG003096-3124)
- EWall Requirements for CASC Program - 07/12/03 (COG003125-3129)
- The Use of Ewall in Phase II of the CASC Program (COG003130-3134)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments - Outline - Jan 14, 2003 (COG3135)
- Collectively, these specific claims capture the essence of EWall — an acronym for Electronic Card Wall - Outline (COG003136-3143)
- Mini-Scenario for Live-Demonstration (COG003136-3143)
- EWall -Electronic Card Wall Computational Support for Decision Making in Collaborative Environments (COG003148-3161)
- Electronic Card Wall Computational Support for Decision Making in Collaborative Environments - Keel - Aug, 2000 (COG003162-00369)

- Ewall - TC3 Workshop ONR - MIT - Jan 15-17, 2003 - San Diego (COG003170-3195)
- Ewall Modules, Diagrams, and Mockups (COG003196-3213)
- Ewall Review of Human Factors Discovery and Invention Projects Code 342 - Cognitive and Neural Science ONR - Research Program TC# - Technology for Command and Control Collaboration - Washington DC, Sep 5-6, 2001 (COG003214-3241)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments White Paper V1.0 January 6th 2001 - Keel (COG003242-3263)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments White Paper V2.0 October 9th 2001 – Keel (COG003264-3272)
- Ewall Diagrams/Mockups (COG003273-3280)
- PROCESS AND RELATION ANALYSIS Capturing Architectural Thought by Paul E. Keel - Feb 1997 – Master's Thesis (COG003281-3331)
- Remote Collaboration - Notes (COG003332)
- Database Management Notes (COG003332)
- Knowledge Construction Modules/Projects (DesCo, Cardwall, Filter Mediated Design, DataBox) (COG-003334-3336)
- Synthesis of Thought - Knowledge Construction in Decentralized Environments Major: Knowledge Construction Minor: Remote Collaboration (re), Design Propagation (dp), Database Management (dm) (COG003337-3339)
- Diagrams (COG003337-3339)
- Advantages for administering and viewing Early Bird news with NewsStripe (COG003337-3339)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments - Outline - ONR CKM Workshop - Jan 14-15, 2004 (COG003343)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Research Proposal June 11th 2000 - IBM Canada Limited (COG003344-33451)

- EWall - Electronic Card Wall Computational Support for Information Sharing and Brainstorming White Paper June 4th 2000 Submitted to The Space and Naval Warfare Systems Center San Diego (COG003352-3357)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments White Paper V1.0 January 6th 2001 (COG003358-3379)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Research Proposal V4.0 December 6th 2000 (COG003380-3386)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments (COG003387-3391)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V5.0 October 9th 2001 - ONR (COG003352-3402)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V5.1 November 1st 2001 (COG003403-3420)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal February 6th 2002 Submitted to: National Science Foundation (COG-003421-3436)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal, January 13th 2003 (COG-003421-3436)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Project Overview, January 13th 2003 (COG003442-3446)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal. January 13th 2003 (modified March 03rd 2003) Submitted by Patrick Winston (COG003447-3449)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.1 March 17th 2004 - ONR (COG003447-3449)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.5 April 16th 2004 - ONR (COG003467-3488)

- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.0 March 9th 2004 - ONR (COG003489-3503)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.1 March 12th 2004 - ONR (COG003504-3519)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.1 March 17th 2004 - ONR (COG003520-3536)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.2 April 1st 2004 - ONR (COG003537-3557)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V8.6 April 16th 2004 - ONR (COG003558-3578)
- Diagram - (COG003579)
- KNOWLEDGE TRADING Computational Support for Individual and Collaborative Sense-Making Activities Paul Keel Dissertation Proposal February 26th, 2003 (COG003580-3581)
- Ewall Mockup (COG-003582-3593)
- KNOWLEDGE TRADING Computational Support for Collaborative Understanding and Decision-Making Paul Keel Dissertation Proposal February 25th, 2003 (COG003594-3595)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments Proposal V5.1 November 1st 2001 - ONR (COG003596-3613)
- PROCESS AND RELATION ANALYSIS Capturing Architectural Thought Paper - Paul Keel - 1/7/97 (COG003614-3642)
- The Card Wall - Process and Relation Analysis - Paul Keel 1/7/97 (COG003643-3664)
- EWall - Electronic Card Wall Computational Support for Decision Making in Collaborative Environments - Poster - Office of Naval Research, Collaboration and Knowledge Management Workshop, January 13 - 15 2004 (COG003665)

- Electronic Card Wall Computational Support for Decision Making in Collaborative Environments - P Keel - Aug 2000 (COG-003666-3670)
- Contract or Grant Number: N0001401WX20203 Contract or Grant Title: EWall - Electronic Card Wall: Computational Support for Decision Making in Collaborative Environments ONR Program Officer: Letsky - Winston - FALL / WINTHER FY01 (COG003671-3695)
- Mike Kahan Summer 2003 UROP Patrick Winston, Project Initiator Paul Keel, Project Manager 4/11/03 EWall UROP Summer 2003 Proposal (COG003696-3698)
- Ewall Visualization Module - Yao Li & Paul Keel - MIT Ewall Project - August 2003 (COG-003699-3714)
- Ewall Visualization Module - Slide Deck - August 2003 (COG003715-3730)
- PROCESS AND RELATION ANALYSIS Capturing Architectural Thought - Paul Keel - Master's Thesis - February 1997 (COG-003731-3781)

Based on information and belief, Meta contends that the asserted claims are invalid as anticipated under 35 U.S.C. § 102 and/or obvious under 35 U.S.C. § 103 (*see infra* Section IV, incorporated herein) based on any one or more of the EWall Documents. These publications constitute prior art under 35 U.S.C. § 102, and their titles, authors, publishers, and dates of publication are included on the face of those documents. For example and without limitation, Exhibits A-22-24, B-22-24, and C-22-24 (incorporated herein) show exemplary EWall Documents that disclose and/or render obvious the asserted claims of each Asserted Patent. In addition to the EWall Documents listed above, Meta hereby discloses as prior art publications all references disclosed in these Contentions and disclosed during prosecution of the Asserted Patents, such as press releases, user manuals, and other related documentation about the EWall Project. Meta reserves the right to supplement this list as it learns in the course of discovery of other references, prior art public use, and/or sale that would anticipate and/or render the asserted claims obvious.

Based on information and belief, Meta contends that the asserted claims are invalid as anticipated under 35 U.S.C. § 102 and/or obvious under 35 U.S.C. § 103 (*see infra* Section IV,

incorporated herein) based on the EWall Project. The EWall Project is a prior art system/item/knowledge/thing, described at least in part by the EWall Documents, that was made, used, known, offered for sale, sold, and/or imported into the U.S. prior before the priority dates of the asserted claims, and therefore constitutes prior art under 35 U.S.C. § 102.

The EWall System was known and used by others in the United States (see § 102(a)) and was in public use or on sale in the United States more than one year before the purported priority date of the Asserted Patents (see § 102(a)). For example and without limitation, the EWall Project was made publicly available with widespread collaborative use among non-inventors, including at MIT, the ONR, and the general public, which constitutes prior knowledge and/or public use by others under pre-AIA § 102(a) and (b). According to named inventor Paul Erich Keel, the EWall Project was publicized to “about two dozen invited sponsored researchers and program managers” between 2002 and 2004. *See* May 1, 2017 Declaration of Paul Erich Keel, Ph.D. (submitted in App. No. 15/243,497), p. 2. On information and belief, the EWall Project was also made publicly available through public demonstrations, such as in Cambridge Massachusetts.

As another example, no later than 2002, “[a] first set of prototypes incorporating the base functionality for all five modules is completed” with the “release [of] the first complete implementation of EWall by fall 2003.” *See EWall: Computational Support/or Decision Making in Collaborative Environments*, p. 428.

As another example, and based on information and belief, the EWall System was described in “three software prototypes” that, according to named inventor Paul Keel, were “publicly accessible prior to May 2003” *See* May 1, 2017 Declaration of Paul Erich Keel, Ph.D. (submitted in App. No. 15/243,497), p. 2.

As another example, NewsView, which is “part of” EWall, had completed prototypes no later than 2002. *See* EWall NewsView Prototype; EWall NewsView Overview.

Based on information and belief, EWall Project and/or one or more of the EWall Documents anticipates and/or renders obvious the Asserted Claims of each Asserted Patent (at least as Defendant understands Plaintiff’s application of the Asserted Claims in an effort to show infringement). To the extent Cogmedia argues that any element below is not disclosed by EWall Project and/or one or more of the EWall Documents, a person of ordinary skill in the art would have found it obvious to combine the teachings of EWall Project and/or one or more of the EWall Documents with the background knowledge of a person of ordinary skill in the art and/or the additional references (*see supra* Section IV.D, incorporated herein).

For example and without limitation, Exhibits A-22-24, B-22-24, and C-22-24 (incorporated herein) show that the EWall System discloses and/or renders obvious the asserted claims of each Asserted Patent.

As another example, the EWall Project and/or one or more of the EWall Documents discloses *interacting with at least one data item obtained from at least one source, the at least one source being external to the at least one computer*, and related limitations (*see, e.g.,* ’562 patent, element [1.Pre], ’141 patent, element [1.Pre], ’371 patent, element [1.Pre]). *See, e.g.:*

- *EWall: Computational Support/or Decision Making in Collaborative Environments*, p. 428:
 - “Collecting: EWall will maintain and automatically structure a dynamic database reflecting the content and established relations of Work Areas and other information sources.”
 - “The Information Module will keep track of recent additions and modifications to parallel streams of selected information sources such as databases, newspapers and email accounts.”
 - “The Knowledge Module will retrieve and display information available from selected information sources relevant to the content on the user’s Work Area”

- “The Visualization Module will offer various ways of viewing and rearranging the content on Work Areas and from other information sources. The Visualization Module will contain a wide variety of algorithms to automatically rearrange Information Objects as well as to add and modify previously established relationships among Information Objects. The algorithms will respond to the users’ different styles of working and allow users to explore various relational aspects of Work Areas and other information sources.”
- *EWall: Electronic Card Wall Introduction:*
 - “EWall is designed for command and control collaboration yet its modular software components will allow for a wide range of alternative applications such as user programming and meeting support, news acquisition and distribution, organizational knowledge management, peer-to-peer learning and problem solving as well as Internet navigation.”
 - “EWall delivers the technology for the automatic conversion of user generated spatial information arrangements into computer understandable networked information for the automatic exchange and prioritization of contributions between collaborating problem-solvers. The goal lies in the automatic retrieval of relevant information from selected sources through the automated structuring of databases.”
 - “Illustration 1 provides a conceptual example of how EWall might support a typical problem-solving process. The shapes on the left represent information that is available from various sources and in different formats. EWall will collect and convert this information into similar looking iconic representations called information objects. These information objects will allow for an unbiased comparison and evaluation by individual problem-solvers. The problem-solvers will select and transfer relevant information objects to their individual work areas where they can be organized and discussed with other problem-solvers. This process will continue until the problem-solvers conclude their activities by combining their solutions and ideas in preparation for a final documentation or presentation.”
- *EWall NewsView Prototype*, pp. 1-2
- *EWall NewsView Overview:*
 - “The NewsView takes a few seconds to load, because it is bringing 50-100 images to your computer”
 - “It can be [sic] used to carefully track or casually scan information sources.”
 - “NewsView represents every addition and modification to a selected information source with an information object. An information object is a square box containing a heading and a picture. The information object links to the information source.”
- *EWall Document 1 (Jan. 2004):*

- See P. 10, describing step “1” – users create and organize cards. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *identifying a first set of information objects, each including associated positional information*).
- See pp. 7-8, describing an external information source such as a web browser is used to create an information object. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *receiving, from the first user, an external information source onto the workspace view to create a card*).
- See P. 14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *creating and displaying a new card in the workspace view*).
- See P. 10, describing step “1”. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *creating a new card record in the database to correspond to the new card in the workspace view*).
- See p. 7, describing an “INFORMATION BAR” and “Hyperlinks” and “Attachments.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *associating an information source identified by the first user to the new card created in the workspace view*).
- See p. 7, describing attributes such as date and time are stored with the card; and p.14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *storing card attributes and an identify of the information source in the new card record in the card database*).
- See p. 8, describing cards are stored in a “Database server.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 5 (Examiner finding these disclosures satisfy *maintaining the card database containing respective card records associated with a plurality of cards*).
- See p. 7, describing, an “INFORMATION BAR.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 5 (Examiner finding these disclosures satisfy *each card record including an identification of card content associated with that card record*).
- See p. 8, describing, “Workspace View”; p. 10, describing step “1” – a workspace is displayed to allow the creation and the organization of cards. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *displaying a workspace view associated with a first user*).
- See pp. 7, 10, describing step “1.” App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *receiving a*

selection of information sources to be respectfully associated with cards to be created within the workspace view);

- *See pp. 7-8, describing “Workspace View.” App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy displaying, for each selected information source, a respective card in the workspace view for viewing by the first user).*
- *Document 2 (Jan. 2003):*
 - *See pp. 11-12, describing cards are placed in a “WorkArea.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 3 (Examiner finding these disclosures satisfy identifying a first set of information objects, each including associated positional information).*
 - *See p. 8, describing an external information source such as an internet site is used to create a information object. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy receiving, from the first user, an external information source onto the workspace view to create a card).*
 - *See P. 14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy creating and displaying a new card in the workspace view).*
 - *See P. 12, describing step “workspace module”. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 14 (Examiner finding these disclosures satisfy creating a new card record in the database to correspond to the new card in the workspace view).*
 - *See p. 8, describing an “INFORMATION BAR” and “Hyperlinks” and “Attachments.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 14 (Examiner finding these disclosures satisfy associating an information source identified by the first user to the new card created in the workspace view).*
 - *See p. 23, describing cards are stored in a database. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 14 (Examiner finding these disclosures satisfy storing card attributes and an identify of the information source in the new card record in the card database).*
 - *See pp. 11-12, describing probable relations among on cards are based on their spatial arrangements. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 3 (Examiner finding these disclosures satisfy displaying a first set of cards on a graphical user interface, the positional information associated with each information object being a location of each card on the graphical user interface).*
 - *See p. 23, describing cards are stored in a “collaborative database.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 4 (Examiner finding*

these disclosures satisfy *maintaining the card database containing respective card records associated with a plurality of cards*).

- See p. 8, describing, an “INFORMATION BAR.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *each card record including an identification of card content associated with that card record*).
- See p. 13. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *the plurality of cards including the first set of cards and the second set of cards, and the database maintaining a respective card record for each card in the first set of cards and the second set of cards*).
- See p. 8, describing cards are created from external information sources such as screen shots and Internet sites. App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 7 (Examiner finding these disclosures satisfy *receiving a selection of information sources to be respectfully associated with cards to be created within the workspace view*).

For example and without limitation, the EWall Project and/or one or more of the EWall Documents discloses *responsive to a user selection of the at least one data item: causing configuring of each of the data items into a distinct information object by extracting, from each data item, extracted data including a picture and a heading, and causing storing of data corresponding to each of the information objects, including a link to the at least one data item, in a database system; displaying a representation of each of at least two of the information objects in the database system, the representation being in a uniform format, wherein the format includes a card, and, within the card, in uniform locations thereof, the picture, the heading, a set of indicators, and a set of graphically accessible functions including, and related limitations (see, e.g., '562 patent, element [1.a], '141 patent, element [1.a], '371 patent, element [1.a]). See, e.g.:*

- *EWall: Computational Support/or Decision Making in Collaborative Environments:*
 - “EWall proposes a standardized format for the visual representation and organization of information. This format is modeled after William Pena’s Problem Seeking methodology [3] and referred to as an Information Object. **An Information Object is a rectangular box that contains a picture, a heading and a hyper-link to a web site or a database item. The picture may either serve as a visual reminder or display relevant content.** Information Objects

may be used either by individuals as objects to think with [2] or by groups of people to develop a shared contextual understanding [5, 1].” P. 427

- See Figure 1 (“Figure 1: EWall’s Graphical Workspace and Information Management components. The red arrows illustrate the flow of Information Objects.”). P. 427.
- “**The Workspace Module** will allow users or groups of users to create, collect and organize Information Objects. The interface will consist of a work area to spatially layout, group and link information objects, a holding area to keep information with undetermined relevance and a viewing area to explore the (hyper-linked) content of Information Objects. **The Information Module** will keep track of recent additions and modifications to parallel streams of selected information sources such as databases, newspapers and email accounts. Changes will be arranged in a matrix by categories along the y-axis and by time along the x-axis. Users will be able to manually add Information Objects and comments to Information Objects. **The Knowledge Module** will retrieve and display information available from selected information sources relevant to the content on the user’s Work Area. The”
- “The Visualization Module will offer various ways of viewing and rearranging the content on Work Areas and from other information sources. The Visualization Module will contain a wide variety of algorithms to automatically rearrange Information Objects as well as to add and modify previously established relationships among Information Objects. The algorithms will respond to the users’ different styles of working and allow users to explore various relational aspects of Work Areas and other information sources.”

- *EWall: Electronic Card Wall Introduction:*

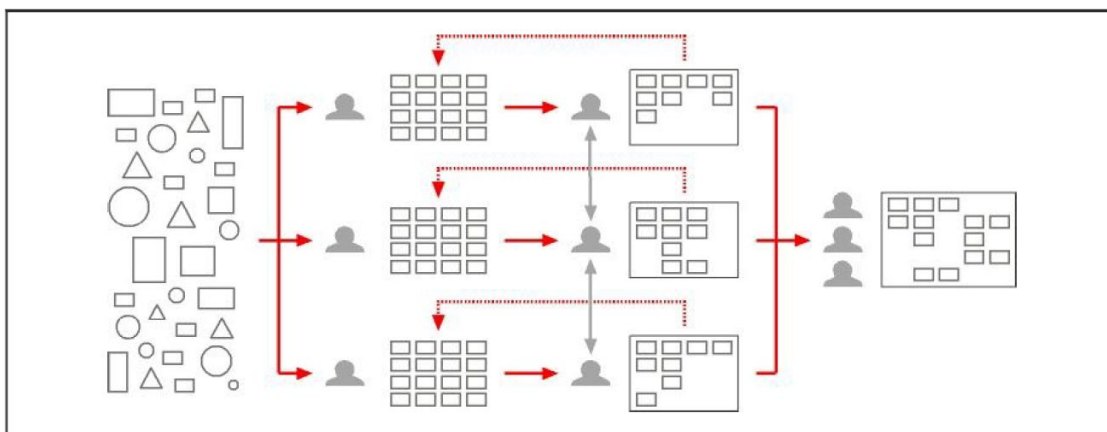


Illustration 1: Concept

Illustration 1 provides a conceptual example of how EWall might support a typical problem-solving process. The shapes on the left represent information that is available from various sources and in different formats. EWall will collect and convert this information into similar looking iconic representations called information objects. These information objects will allow for an unbiased comparison and evaluation by individual problem-solvers. The problem-solvers will select and transfer relevant information objects to their individual work areas where they can be organized and discussed with other problem-solvers. This process will continue until the problem-solvers conclude their activities by combining their solutions and ideas in preparation for a final documentation or presentation.

P. 5 (Figure 1).

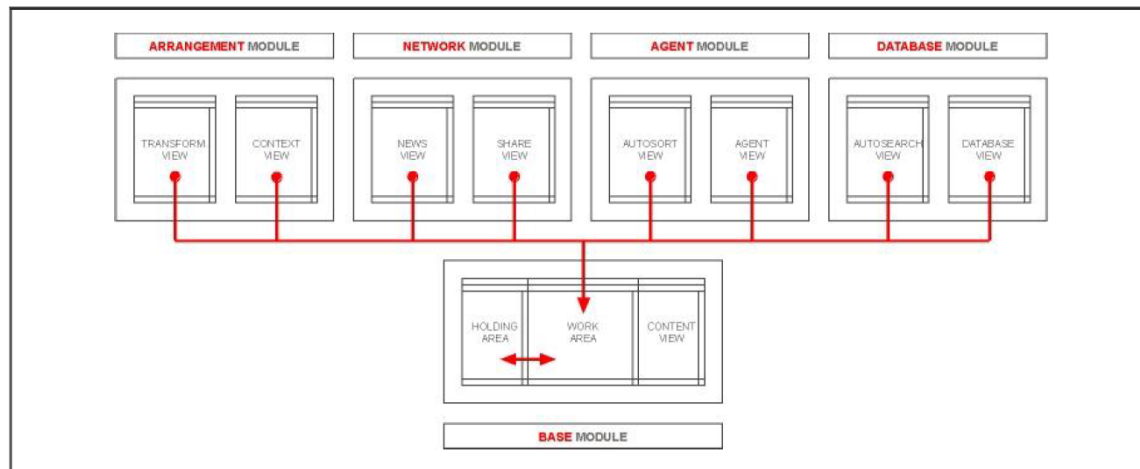
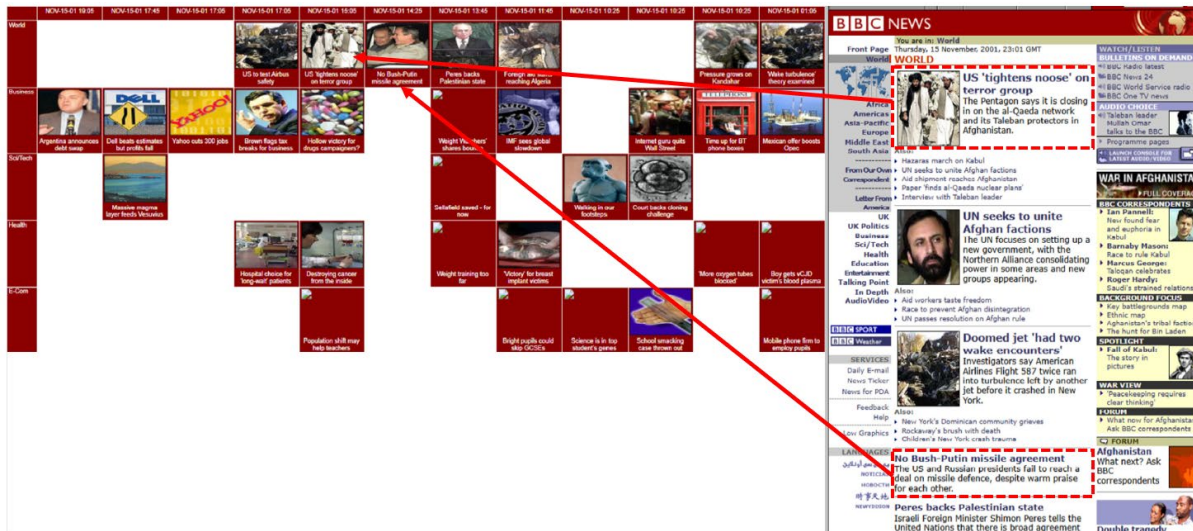


Illustration 2: EWall User Interfaces

Illustration 2 introduces EWall's user interfaces. EWall will consist of five independent and interoperable modules, each of which will provide problem-solvers with one or more interfaces. The interfaces provided by the EWall Base Module will allow problem-solvers to organize information objects. The interfaces provided by the four remaining EWall modules will allow problem-solvers to view and incorporate new information objects. Problem-solvers will focus on organizing information objects while sporadically scanning for new information objects. EWall will provide problem-solvers with information objects that are most likely to fit their interest through a computational analysis of the problem-solvers individual arrangements of information objects.

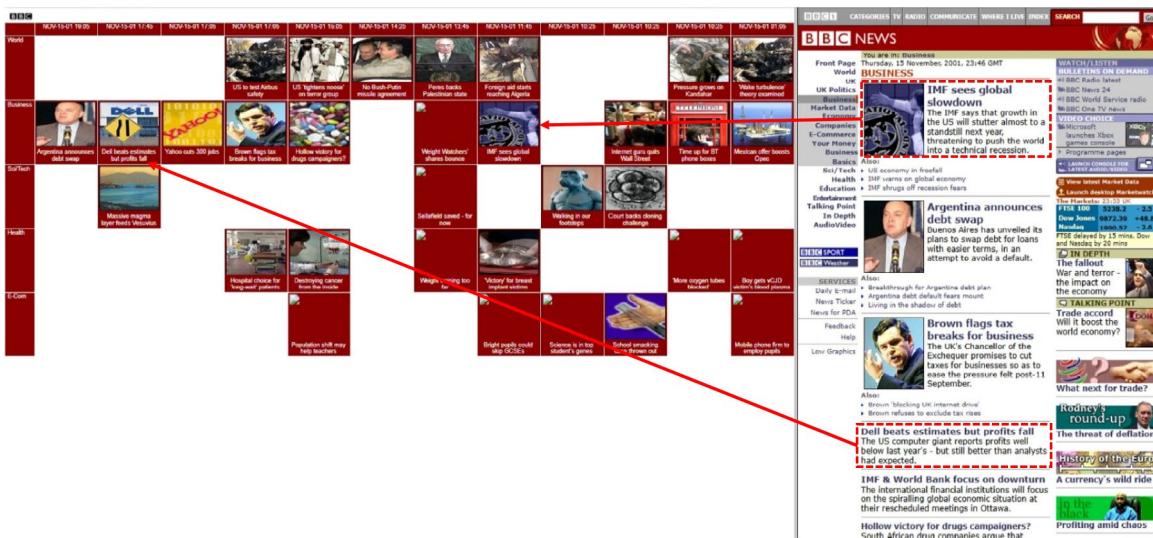
P. 6; p. 7-8 (discussing 5 modules).

- *EWall NewsView Overview:*
 - “NewsView represents every addition and modification to a selected information source with an information object. An information object is a square box containing a heading and a picture. The information object links to the information source.”
- *EWall NewsView Prototype:*
 - As shown below, EWall causes news articles from the BBC “World” Section (on the right) to be configured into a distinct information object (on the left) by extracting extracted data (including a picture and a heading). On information and belief, this includes causing storing of data corresponding to each of the information objects, including a link to the at least one data item, in a database system. As shown below, a representation in a uniform format of each of at least two of the information objects in the database system is displayed. The format includes a card, and, within the card, in uniform locations, the picture, the heading, a set of indicators, and a set of graphically accessible functions.



EWall NewsView Prototype, World Section (annotations added).

- As shown below, EWall causes news articles from the BBC “Business” Section (on the right) to be configured into a distinct information object (on the left) by extracting extracted data (including a picture and a heading). On information and belief, this includes causing storing of data corresponding to each of the information objects, including a link to the at least one data item, in a database system. As shown below, a representation in a uniform format of each of at least two of the information objects in the database system is displayed. The format includes a card, and, within the card, in uniform locations, the picture, the heading, a set of indicators, and a set of graphically accessible functions.



EWall NewsView Prototype, Business Section (annotations added).

- *EWall Document 1 (Jan. 2004):*
 - See P. 10, describing step “1” – users create and organize cards. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 4 (Examiner finding these

disclosures satisfy *identifying a first set of information objects, each including associated positional information*).

- See pp. 7-8, describing an external information source such as a web browser is used to create an information object. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *receiving, from the first user, an external information source onto the workspace view to create a card*).
- See P. 14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *creating and displaying a new card in the workspace view*).
- See P. 10, describing step “1”. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *creating a new card record in the database to correspond to the new card in the workspace view*).
- See p. 7, describing an “INFORMATION BAR” and “Hyperlinks” and “Attachments.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *associating an information source identified by the first user to the new card created in the workspace view*).
- See p. 7, describing attributes such as date and time are stored with the card; and p.14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *storing card attributes and an identify of the information source in the new card record in the card database*).
- See pp. 10, 15, describing probable relations among on cards are based on their spatial arrangements. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *displaying a first set of cards on a graphical user interface, the positional information associated with each information object being a location of each card on the graphical user interface*).
- See p. 8, describing cards are stored in a “Database server.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 5 (Examiner finding these disclosures satisfy *maintaining the card database containing respective card records associated with a plurality of cards*).
- See p. 7, describing, an “INFORMATION BAR.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 5 (Examiner finding these disclosures satisfy *each card record including an identification of card content associated with that card record*).
- See p. 14. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 5 (Examiner finding these disclosures satisfy *the plurality of cards including the first set of cards and the second set of cards, and the database maintaining a*

respective card record for each card in the first set of cards and the second set of cards).

- See p. 8, describing, “Workspace View”; p. 10, describing step “1” – a workspace is displayed to allow the creation and the organization of cards. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *displaying a workspace view associated with a first user*).
- See pp. 7, 10, describing step “1.” App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *receiving a selection of information sources to be respectfully associated with cards to be created within the workspace view*);
- See pp. 7-8, describing “Workspace View.” App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *displaying, for each selected information source, a respective card in the workspace view for viewing by the first user*).
- See p. 7, describing “ICON AREA”, “HEADING BAR”, and “INFORMATION BAR.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy *for each card, displaying, within a card perimeter: i) a card graphic representing information associated with the card; ii) a card heading identifying the card; iii) a plurality of card attribute indicators, each card attribute indicator indicative of a card state, the card attribute indicators identifying ownership and a geographic location of the card*).
- See p. 7, describing “INFORMATION BAR” and “Comments.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy *displaying, within the card perimeter, at least one messaging icon, the messaging icon, the messaging icon operable by a user to send a message to a card associated with at least one other user*).
- *EWall Document 2 (Jan. 2003):*
 - See pp. 11-12, describing cards are placed in a “WorkArea.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 3 (Examiner finding these disclosures satisfy *identifying a first set of information objects, each including associated positional information*).
 - See p. 8, describing an external information source such as an internet site is used to create a information object. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy *receiving, from the first user, an external information source onto the workspace view to create a card*).
 - See P. 14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy *creating and displaying a new card in the workspace view*).

- See P. 12, describing step “workspace module”. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 14 (Examiner finding these disclosures satisfy *creating a new card record in the database to correspond to the new card in the workspace view*).
- See p. 8, describing an “INFORMATION BAR” and “Hyperlinks” and “Attachments.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 14 (Examiner finding these disclosures satisfy *associating an information source identified by the first user to the new card created in the workspace view*).
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- See p. 8, describing, an “INFORMATION BAR.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *each card record including an identification of card content associated with that card record*).
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for each selected information source, a respective card in the workspace view for viewing by the first user).

- *See p. 8, describing “ICON AREA”, “HEADING BAR”, and “INFORMATION BAR.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at pp. 11-12 (Examiner finding these disclosures satisfy for each card, displaying, within a card perimeter: i) a card graphic representing information associated with the card; ii) a card heading identifying the card; iii) a plurality of card attribute indicators, each card attribute indicator indicative of a card state, the card attribute indicators identifying ownership and a geographic location of the card).*
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For example and without limitation, the EWall Project and/or one or more of the EWall Documents discloses *a comment function... a vote function... a copy function... a link function... and... an indicator reflecting commenting activity associated with the card (and other indicators), and related limitations (see, e.g., '562 patent, element [1.b]-[1.f], '141 patent, element [1.b]-[1.f], '371 patent, element [1.b]-[1.f]). See, e.g.:*

- *EWall: Computational Support/or Decision Making in Collaborative Environments:*
 - “EWall proposes a standardized format for the visual representation and organization of information. This format is modeled after William Pena’s Problem Seeking methodology [3] and referred to as an Information Object. **An Information Object is a rectangular box that contains a picture, a heading and a hyper-link to a web site or a database item. The picture may either serve as a visual reminder or display relevant content.** Information Objects may be used either by individuals as objects to think with [2] or by groups of people to develop a shared contextual understanding [5, 1].” P. 427
 - See Figure 1 (“Figure 1: EWall’s Graphical Workspace and Information Management components. The red arrows illustrate the flow of Information Objects.”). P. 427.
 - “**The Workspace Module** will allow users or groups of users to create, collect and organize Information Objects. The interface will consist of a work area to spatially layout, group and link information objects, a holding area to keep information with undetermined relevance and a viewing area to explore the (hyper-linked) content of Information Objects. **The Information Module** will

keep track of recent additions and modifications to parallel streams of selected information sources such as databases, newspapers and email accounts. Changes will be arranged in a matrix by categories along the y-axis and by time along the x-axis. Users will be able to manually add Information Objects and comments to Information Objects. The Knowledge Module will retrieve and display information available from selected information sources relevant to the content on the user's Work Area."

- "The Visualization Module will offer various ways of viewing and rearranging the content on Work Areas and from other information sources. The Visualization Module will contain a wide variety of algorithms to automatically rearrange Information Objects as well as to add and modify previously established relationships among Information Objects. The algorithms will respond to the users' different styles of working and allow users to explore various relational aspects of Work Areas and other information sources."

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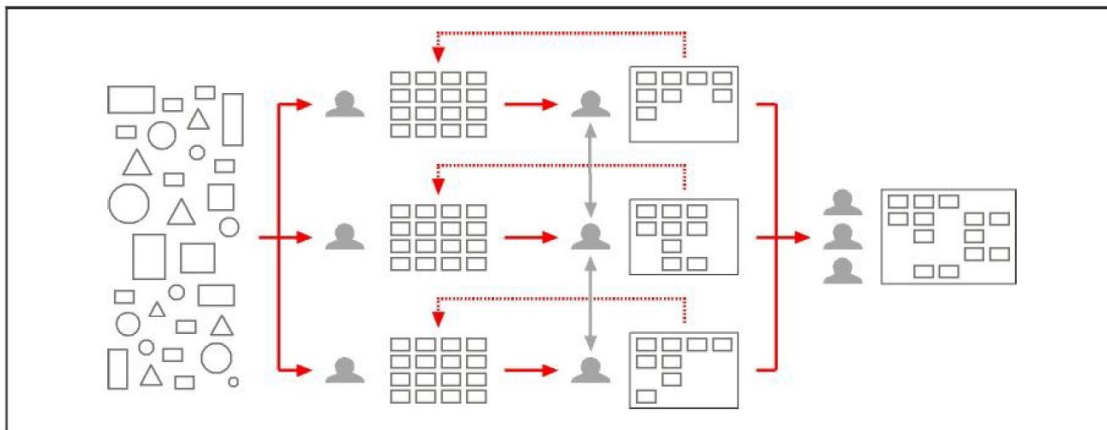


Illustration 1: Concept

Illustration 1 provides a conceptual example of how EWall might support a typical problem-solving process. The shapes on the left represent information that is available from various sources and in different formats. EWall will collect and convert this information into similar looking iconic representations called information objects. These information objects will allow for an unbiased comparison and evaluation by individual problem-solvers. The problem-solvers will select and transfer relevant information objects to their individual work areas where they can be organized and discussed with other problem-solvers. This process will continue until the problem-solvers conclude their activities by combining their solutions and ideas in preparation for a final documentation or presentation.

P. 5 (Figure 1).

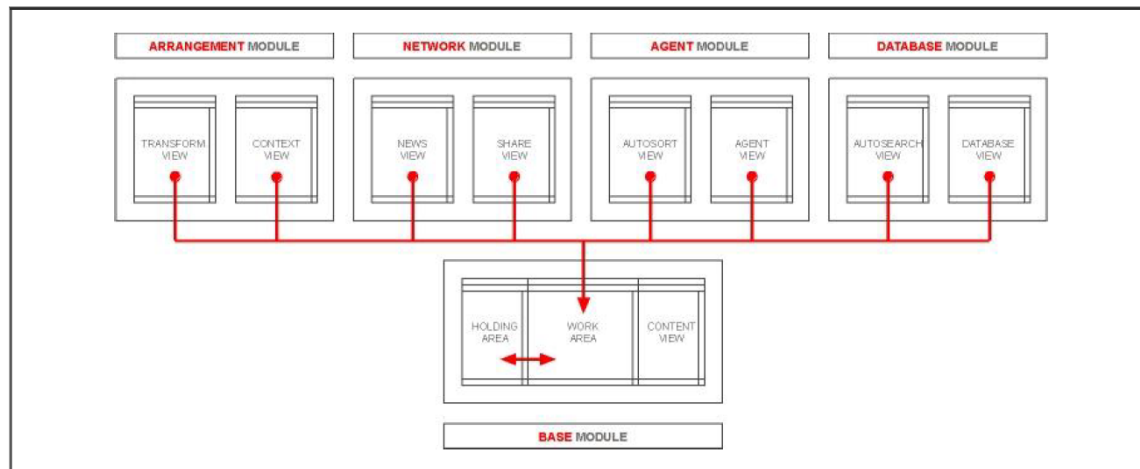
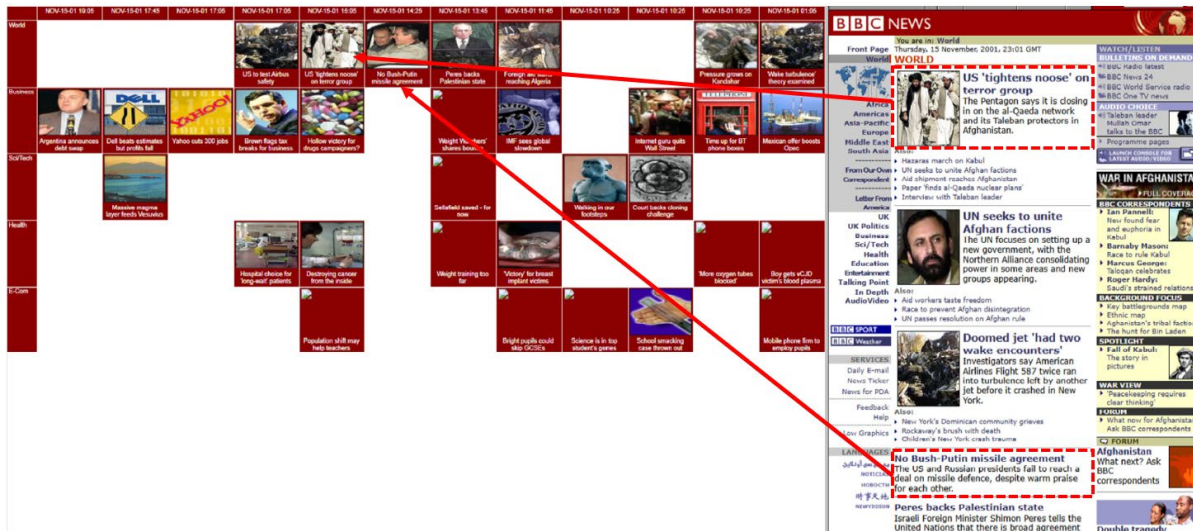


Illustration 2: EWall User Interfaces

Illustration 2 introduces EWall's user interfaces. EWall will consist of five independent and interoperable modules, each of which will provide problem-solvers with one or more interfaces. The interfaces provided by the EWall Base Module will allow problem-solvers to organize information objects. The interfaces provided by the four remaining EWall modules will allow problem-solvers to view and incorporate new information objects. Problem-solvers will focus on organizing information objects while sporadically scanning for new information objects. EWall will provide problem-solvers with information objects that are most likely to fit their interest through a computational analysis of the problem-solvers individual arrangements of information objects.

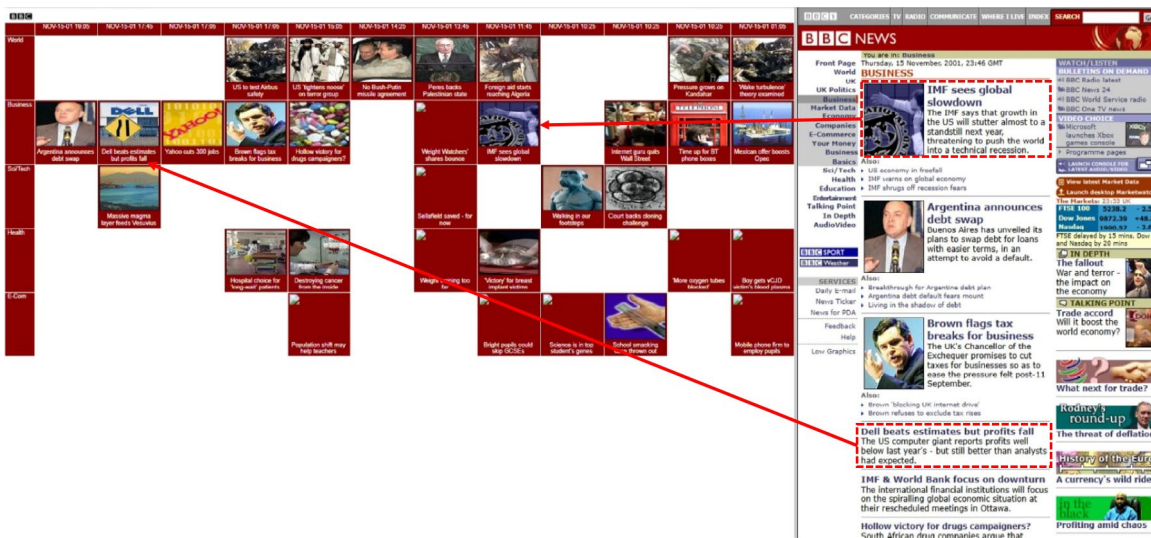
P. 6; p. 7-8 (discussing 5 modules).

- *EWall NewsView Overview:*
 - “NewsView represents every addition and modification to a selected information source with an information object. An information object is a square box containing a heading and a picture. The information object links to the information source.”
- *EWall NewsView Prototype:*
 - As shown below, EWall causes news articles from the BBC “World” Section (on the right) to be configured into a distinct information object (on the left) by extracting extracted data (including a picture and a heading). On information and belief, this includes causing storing of data corresponding to each of the information objects, including a link to the at least one data item, in a database system. As shown below, a representation in a uniform format of each of at least two of the information objects in the database system is displayed. The format includes a card, and, within the card, in uniform locations, the picture, the heading, a set of indicators, and a set of graphically accessible functions.



EWall NewsView Prototype, World Section (annotations added).

- As shown below, EWall causes news articles from the BBC “Business” Section (on the right) to be configured into a distinct information object (on the left) by extracting extracted data (including a picture and a heading). On information and belief, this includes causing storing of data corresponding to each of the information objects, including a link to the at least one data item, in a database system. As shown below, a representation in a uniform format of each of at least two of the information objects in the database system is displayed. The format includes a card, and, within the card, in uniform locations, the picture, the heading, a set of indicators, and a set of graphically accessible functions.



EWall NewsView Prototype, Business Section (annotations added).

- EWall Document 1 (Jan. 2004):

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- See P. 14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *creating and displaying a new card in the workspace view*).
- See P. 10, describing step “1”. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *creating a new card record in the database to correspond to the new card in the workspace view*).
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- See pp. 10, 15, describing probable relations among on cards are based on their spatial arrangements. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *displaying a first set of cards on a graphical user interface, the positional information associated with each information object being a location of each card on the graphical user interface*).
- See p. 7, describing, an “INFORMATION BAR.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 5 (Examiner finding these disclosures satisfy *each card record including an identification of card content associated with that card record*).
- See p. 8, describing, “Workspace View”; p. 10, describing step “1” – a workspace is displayed to allow the creation and the organization of cards. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *displaying a workspace view associated with a first user*).
- See pp. 7-8, describing “Workspace View.” App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *displaying, for each selected information source, a respective card in the workspace view for viewing by the first user*).
- See p. 7, describing “ICON AREA”, “HEADING BAR”, and “INFORMATION BAR.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy *for each card, displaying, within a card perimeter: i) a card graphic representing information associated with the card; ii) a card heading identifying the card; iii) a plurality of card attribute indicators, each card attribute indicator indicative of a card*).

state, the card attribute indicators identifying ownership and a geographic location of the card).

- *See p. 7, describing “INFORMATION BAR” and “Comments.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy displaying, within the card perimeter, at least one messaging icon, the messaging icon, the messaging icon operable by a user to send a message to a card associated with at least one other user).*
- *EWall Document 2 (Jan. 2003):*
 - *See pp. 11-12, describing cards are placed in a “WorkArea.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 3 (Examiner finding these disclosures satisfy identifying a first set of information objects, each including associated positional information).*
 - *See p. 8, describing an external information source such as an internet site is used to create a information object. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy receiving, from the first user, an external information source onto the workspace view to create a card).*
 - *See P. 14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy creating and displaying a new card in the workspace view).*
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 - *See p. 23, describing cards are stored in a database. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 14 (Examiner finding these disclosures satisfy storing card attributes and an identify of the information source in the new card record in the card database).*
 - *See pp. 11-12, describing probable relations among on cards are based on their spatial arrangements. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 3 (Examiner finding these disclosures satisfy displaying a first set of cards on a graphical user interface, the positional information associated with each information object being a location of each card on the graphical user interface).*
 - *See p. 8, describing, an “INFORMATION BAR.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy each card record including an identification of card content associated with that card record).*

- See p. 12, describing, “WorkArea”. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 7 (Examiner finding these disclosures satisfy *displaying a workspace view associated with a first user*).
- See p. 7, describing, “WorkArea”. App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 7 (Examiner finding these disclosures satisfy *displaying, for each selected information source, a respective card in the workspace view for viewing by the first user*).
- See p. 8, describing “ICON AREA”, “HEADING BAR”, and “INFORMATION BAR.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at pp. 11-12 (Examiner finding these disclosures satisfy *for each card, displaying, within a card perimeter: i) a card graphic representing information associated with the card; ii) a card heading identifying the card; iii) a plurality of card attribute indicators, each card attribute indicator indicative of a card state, the card attribute indicators identifying ownership and a geographic location of the card*).
- See p. 8, describing “INFORMATION BAR” and “Comments.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 12 (Examiner finding these disclosures satisfy *displaying, within the card perimeter, at least one messaging icon, the messaging icon, the messaging icon operable by a user to send a message to a card associated with at least one other user*).

For example and without limitation, the EWall Project and/or one or more of the EWall Documents discloses a *user-selected collection of cards representing information objects in the database system* and related limitations (see, e.g., ’562 patent, element [1.g], ’141 patent, element [1.g], ’371 patent, element [1.g]). See, e.g.:

- *EWall: Computational Support/or Decision Making in Collaborative Environments:*
 - “EWall proposes a standardized format for the visual representation and organization of information. This format is modeled after William Pena’s Problem Seeking methodology [3] and referred to as an Information Object. **An Information Object is a rectangular box that contains a picture, a heading and a hyper-link to a web site or a database item. The picture may either serve as a visual reminder or display relevant content.** Information Objects may be used either by individuals as objects to think with [2] or by groups of people to develop a shared contextual understanding [5, 1].” P. 427
 - See Figure 1 (“Figure 1: EWall’s Graphical Workspace and Information Management components. The red arrows illustrate the flow of Information Objects.”). P. 427.
 - “**The Workspace Module** will allow users or groups of users to create, collect and organize Information Objects. The interface will consist of a work area to

spatially layout, group and link information objects, a holding area to keep information with undetermined relevance and a viewing area to explore the (hyper-linked) content of Information Objects. **The Information Module** will keep track of recent additions and modifications to parallel streams of selected information sources such as databases, newspapers and email accounts. Changes will be arranged in a matrix by categories along the y-axis and by time along the x-axis. Users will be able to manually add Information Objects and comments to Information Objects. The Knowledge Module will retrieve and display information available from selected information sources relevant to the content on the user's Work Area."

- "The Visualization Module will offer various ways of viewing and rearranging the content on Work Areas and from other information sources. The Visualization Module will contain a wide variety of algorithms to automatically rearrange Information Objects as well as to add and modify previously established relationships among Information Objects. The algorithms will respond to the users' different styles of working and allow users to explore various relational aspects of Work Areas and other information sources."

- *EWall: Electronic Card Wall Introduction:*

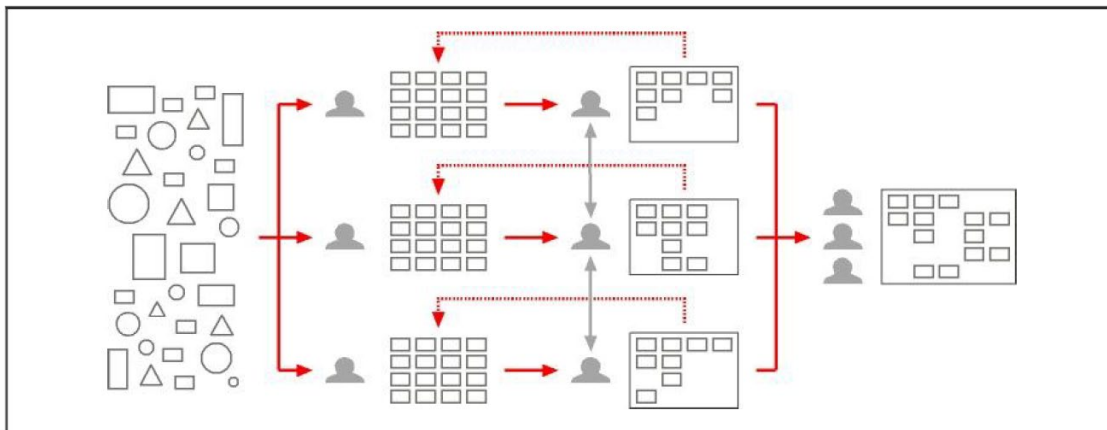


Illustration 1: Concept

Illustration 1 provides a conceptual example of how EWall might support a typical problem-solving process. The shapes on the left represent information that is available from various sources and in different formats. EWall will collect and convert this information into similar looking iconic representations called information objects. These information objects will allow for an unbiased comparison and evaluation by individual problem-solvers. The problem-solvers will select and transfer relevant information objects to their individual work areas where they can be organized and discussed with other problem-solvers. This process will continue until the problem-solvers conclude their activities by combining their solutions and ideas in preparation for a final documentation or presentation.

P. 5 (Figure 1).

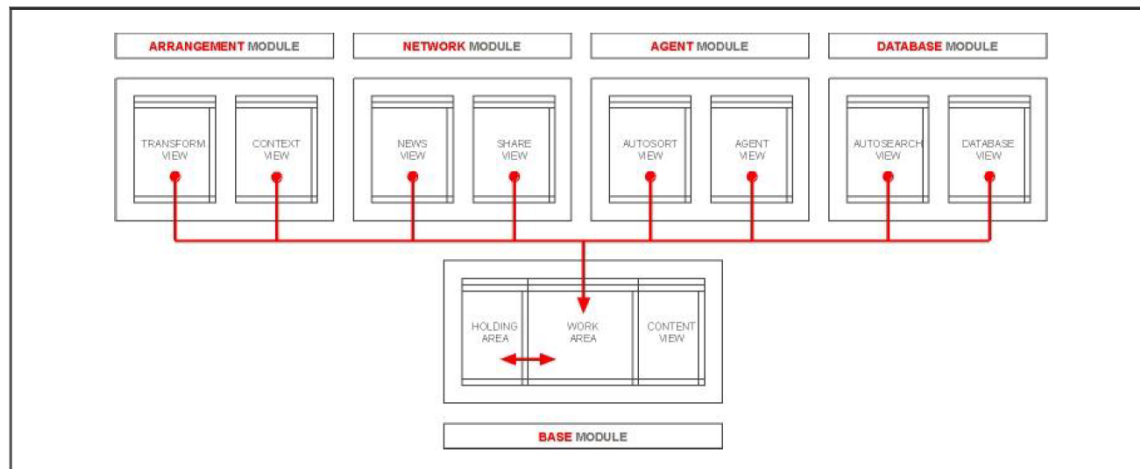
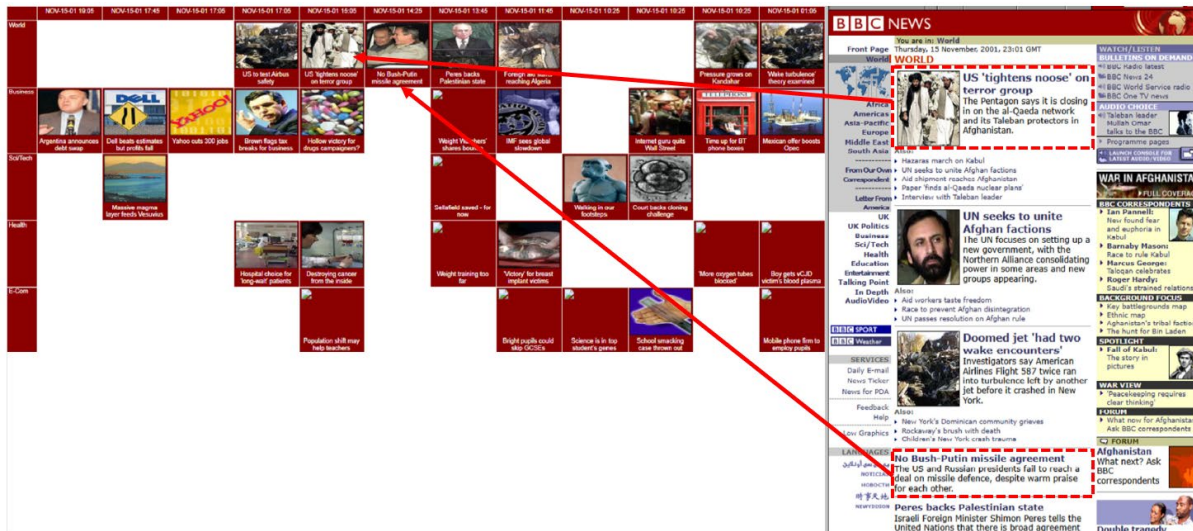


Illustration 2: EWall User Interfaces

Illustration 2 introduces EWall's user interfaces. EWall will consist of five independent and interoperable modules, each of which will provide problem-solvers with one or more interfaces. The interfaces provided by the EWall Base Module will allow problem-solvers to organize information objects. The interfaces provided by the four remaining EWall modules will allow problem-solvers to view and incorporate new information objects. Problem-solvers will focus on organizing information objects while sporadically scanning for new information objects. EWall will provide problem-solvers with information objects that are most likely to fit their interest through a computational analysis of the problem-solvers individual arrangements of information objects.

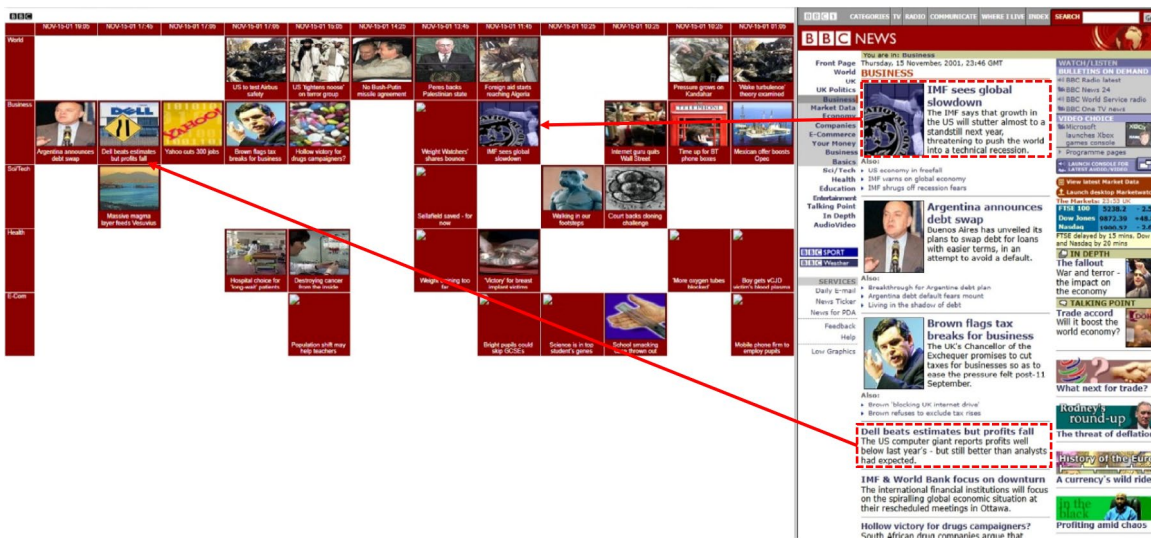
P. 6; p. 7-8 (discussing 5 modules).

- *EWall NewsView Overview:*
 - “NewsView represents every addition and modification to a selected information source with an information object. An information object is a square box containing a heading and a picture. The information object links to the information source.”
- *EWall NewsView Prototype:*
 - As shown below, EWall causes news articles from the BBC “World” Section (on the right) to be configured into a distinct information object (on the left) by extracting extracted data (including a picture and a heading). On information and belief, this includes causing storing of data corresponding to each of the information objects, including a link to the at least one data item, in a database system. As shown below, a representation in a uniform format of each of at least two of the information objects in the database system is displayed. The format includes a card, and, within the card, in uniform locations, the picture, the heading, a set of indicators, and a set of graphically accessible functions.



EWall NewsView Prototype, World Section (annotations added).

- As shown below, EWall causes news articles from the BBC “Business” Section (on the right) to be configured into a distinct information object (on the left) by extracting extracted data (including a picture and a heading). On information and belief, this includes causing storing of data corresponding to each of the information objects, including a link to the at least one data item, in a database system. As shown below, a representation in a uniform format of each of at least two of the information objects in the database system is displayed. The format includes a card, and, within the card, in uniform locations, the picture, the heading, a set of indicators, and a set of graphically accessible functions.



EWall NewsView Prototype, Business Section (annotations added).

- *EWall Document 1 (Jan. 2004):*
 - See P. 10, describing step “1” – users create and organize cards. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 4 (Examiner finding these

disclosures satisfy *identifying a first set of information objects, each including associated positional information*).

- See pp. 7-8, describing an external information source such as a web browser is used to create an information object. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *receiving, from the first user, an external information source onto the workspace view to create a card*).
- See P. 14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *creating and displaying a new card in the workspace view*).
- See P. 10, describing step “1”. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *creating a new card record in the database to correspond to the new card in the workspace view*).
- See p. 7, describing an “INFORMATION BAR” and “Hyperlinks” and “Attachments.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *associating an information source identified by the first user to the new card created in the workspace view*).
- See p. 7, describing attributes such as date and time are stored with the card; and p.14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 15 (Examiner finding these disclosures satisfy *storing card attributes and an identify of the information source in the new card record in the card database*).
- See pp. 10, 15, describing probable relations among on cards are based on their spatial arrangements. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *displaying a first set of cards on a graphical user interface, the positional information associated with each information object being a location of each card on the graphical user interface*).
- See p. 8, describing cards are stored in a “Database server.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 5 (Examiner finding these disclosures satisfy *maintaining the card database containing respective card records associated with a plurality of cards*).
- See p. 7, describing, an “INFORMATION BAR.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 5 (Examiner finding these disclosures satisfy *each card record including an identification of card content associated with that card record*).
- See p. 14. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 5 (Examiner finding these disclosures satisfy *the plurality of cards including the first set of cards and the second set of cards, and the database maintaining a*

respective card record for each card in the first set of cards and the second set of cards).

- See p. 8, describing, “Workspace View”; p. 10, describing step “1” – a workspace is displayed to allow the creation and the organization of cards. See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *displaying a workspace view associated with a first user*).
- See pp. 7, 10, describing step “1.” App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *receiving a selection of information sources to be respectfully associated with cards to be created within the workspace view*);
- See pp. 7-8, describing “Workspace View.” App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 8 (Examiner finding these disclosures satisfy *displaying, for each selected information source, a respective card in the workspace view for viewing by the first user*).
- See p. 7, describing “ICON AREA”, “HEADING BAR”, and “INFORMATION BAR.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy *for each card, displaying, within a card perimeter: i) a card graphic representing information associated with the card; ii) a card heading identifying the card; iii) a plurality of card attribute indicators, each card attribute indicator indicative of a card state, the card attribute indicators identifying ownership and a geographic location of the card*).
- See p. 7, describing “INFORMATION BAR” and “Comments.” See App. No. 11/118,301, July 1, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy *displaying, within the card perimeter, at least one messaging icon, the messaging icon, the messaging icon operable by a user to send a message to a card associated with at least one other user*).
- *EWall Document 2 (Jan. 2003):*
 - See pp. 11-12, describing cards are placed in a “WorkArea.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 3 (Examiner finding these disclosures satisfy *identifying a first set of information objects, each including associated positional information*).
 - See p. 8, describing an external information source such as an internet site is used to create a information object. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy *receiving, from the first user, an external information source onto the workspace view to create a card*).
 - See P. 14, describing the cards and their relations to each other are stored in a database. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 13 (Examiner finding these disclosures satisfy *creating and displaying a new card in the workspace view*).

- See P. 12, describing step “workspace module”. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 14 (Examiner finding these disclosures satisfy *creating a new card record in the database to correspond to the new card in the workspace view*).
- See p. 8, describing an “INFORMATION BAR” and “Hyperlinks” and “Attachments.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 14 (Examiner finding these disclosures satisfy *associating an information source identified by the first user to the new card created in the workspace view*).
- See p. 23, describing cards are stored in a database. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 14 (Examiner finding these disclosures satisfy *storing card attributes and an identify of the information source in the new card record in the card database*).
- See pp. 11-12, describing probable relations among on cards are based on their spatial arrangements. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 3 (Examiner finding these disclosures satisfy *displaying a first set of cards on a graphical user interface, the positional information associated with each information object being a location of each card on the graphical user interface*).
- See p. 23, describing cards are stored in a “collaborative database.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *maintaining the card database containing respective card records associated with a plurality of cards*).
- See p. 8, describing, an “INFORMATION BAR.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *each card record including an identification of card content associated with that card record*).
- See p. 13. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 4 (Examiner finding these disclosures satisfy *the plurality of cards including the first set of cards and the second set of cards, and the database maintaining a respective card record for each card in the first set of cards and the second set of cards*).
- See p. 12, describing, “WorkArea”. See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 7 (Examiner finding these disclosures satisfy *displaying a workspace view associated with a first user*).
- See p. 8, describing cards are created from external information sources such as screen shots and Internet sites. App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 7 (Examiner finding these disclosures satisfy *receiving a selection of information sources to be respectfully associated with cards to be created within the workspace view*);
- See p. 7, describing, “WorkArea”. App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 7 (Examiner finding these disclosures satisfy *displaying*,

for each selected information source, a respective card in the workspace view for viewing by the first user).

- *See p. 8, describing “ICON AREA”, “HEADING BAR”, and “INFORMATION BAR.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at pp. 11-12 (Examiner finding these disclosures satisfy for each card, displaying, within a card perimeter: i) a card graphic representing information associated with the card; ii) a card heading identifying the card; iii) a plurality of card attribute indicators, each card attribute indicator indicative of a card state, the card attribute indicators identifying ownership and a geographic location of the card).*
- *See p. 8, describing “INFORMATION BAR” and “Comments.” See App. No. 11/118,301, Dec. 23, 2008 Non-Final Rejection at p. 12 (Examiner finding these disclosures satisfy displaying, within the card perimeter, at least one messaging icon, the messaging icon, the messaging icon operable by a user to send a message to a card associated with at least one other user).*

Meta’s investigations are ongoing and fact discovery has only just begun. Meta therefore reserves all rights to supplement its contentions in this Section without prejudice in the event that additional evidence is obtained in response to discovery from Cogmedia, third-party discovery such as subpoenas, or through further investigation of publicly available information. Because fact discovery has only just begun in this case, including but not limited to taking depositions of the named inventors of the asserted patents, reviewing Cogmedia’s productions (which is not complete), and seeking discovery of prior inventions by third parties, Meta reserves the right to supplement this disclosure with facts, documents, or other information learned at a later point through discovery or further investigation.

IV. INVALIDITY UNDER 35 U.S.C. §§ 102 AND 103

Meta identifies the following as Primary and Secondary References, and Obviousness Combinations.

A. The ’562 Patent

Meta contends that the primary prior art references identified below and described in the charts attached as Appendices A-1 – A-27, by themselves, anticipate the asserted claims of the

'562 Patent.

Appendix	Primary References
A-01	U.S. Patent No. 7,310,612 (“McQueen”)
A-02	U.S. Patent Application Publication No. 2003/0233422A1 (“Csaszar”)
A-03	U.S. Patent No. 7,080,139 (“Briggs”)
A-04	U.S. Patent No. 7,047,030 (“Forsyth”)
A-05	U.S. Patent No. 6,769,010 (“Knapp”)
A-06	U.S. Patent Application Publication No. 2007/0208802 (“Barman”)
A-07	U.S. Patent Application Publication No. 2005/0177434 (“Davie”)
A-08	U.S. Patent Application Publication No. 2003/0236752 (“Dawson”)
A-09	U.S. Patent No. 6,507,865 (“Hanson”)
A-10	U.S. Patent Application Publication No. 2004/0177319 (“Horn”)
A-11	U.S. Patent Application Publication No. 2003/0103603 (“Kurita”)
A-12	U.S. Patent No. 6,377,288 (“Moran”)
A-13	U.S. Patent No. 5,826,263 (“Nakabayashi”)
A-14	U.S. Patent Application Publication No. 2008/0301237 (“Parsons”)
A-15	U.S. Patent Application Publication No. 2002/0059272A1 (“Porter”)
A-16	U.S. Patent Application Publication No. 2004/0030525A1 (“Robinson”)
A-17	U.S. Patent Application Publication No. 2004/0158455 (“Spivack”)
A-18	U.S. Patent Application Publication No. 2004/0111467 (“Willis”)
A-19	U.S. Patent No. 7,234,117 (“Zaner”)
A-20	“Konfabulator 1.0.2”
A-21	“Sametime”
A-22	Process and Relation Analysis: Capturing Architectural Thought (“Keel I”)
A-23	Knowledge Trading: Computation Support for Individual and Collaborative Sense-Making Activities (“Keel II”)
A-24	EWall Electronic Card Wall (“Winston”)
A-25	“Twine”
A-26	“Twitter”
A-27	“Lifestreams”

To the extent that a primary reference is deemed not to anticipate a claim for failing to teach or suggest one or more limitations of that claim, Meta contends that the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention in view of the prior art reference itself, as described in the attached charts.

To the extent that a primary reference is deemed not to by itself render obvious a claim for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention by the combination of the primary reference with one or more other primary references and/or the knowledge of someone skilled in the art disclosing the missing claim limitation. For example, a person of ordinary skill in the art would have been motivated to combine any reference in Appendices A-1 through A-27 with any other reference(s) in Appendices A-1 through A-27. Such combinations would be achieved, for example, by merely combining the disclosures described in the respective claim charts for each reference.

1. Secondary References

Appendices A-1 through provides, on a limitation-by-limitation basis, an indication of specific prior art references that disclose various limitations of the asserted claims. To the extent that a primary reference is deemed not to by itself render obvious a claim for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention by the combination of the primary reference with one or more of the references listed as disclosing that limitation in Appendices A-1 through , or a similar limitation in Appendices B-1 through B-27 or C-1 through C-27.

4. Knowledge of a Person of Ordinary Skill in the Art

Appendices A-1 through provides, on a limitation-by-limitation basis, an indication of specific prior art references that disclose various limitations of the asserted claims. To the extent

that a primary reference is deemed not to by itself render obvious a claim for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention based on the knowledge of a personal of ordinary skill in the art at the relevant time. Specifically, as discussed in Section IV.D, many of the limitations at the time were well-known elements and it would have been obvious to modify the primary reference to include that feature.

B. The '141 Patent

Meta contends that the primary prior art references identified below and described in the charts attached as Appendices B-1 through B-27, by themselves, anticipate the asserted claims of the '141 Patent.

Appendix	Primary References
B-01	U.S. Patent No. 7,310,612 (“McQueen”)
B-02	U.S. Patent Application Publication No. 2003/0233422A1 (“Csaszar”)
B-03	U.S. Patent No. 7,080,139 (“Briggs”)
B-04	U.S. Patent No. 7,047,030 (“Forsyth”)
B-05	U.S. Patent No. 6,769,010 (“Knapp”)
B-06	U.S. Patent Application Publication No. 2007/0208802 (“Barman”)
B-07	U.S. Patent Application Publication No. 2005/0177434 (“Davie”)
B-08	U.S. Patent Application Publication No. 2003/0236752 (“Dawson”)
B-09	U.S. Patent No. 6,507,865 (“Hanson”)
B-10	U.S. Patent Application Publication No. 2004/0177319 (“Horn”)
B-11	U.S. Patent Application Publication No. 2003/0103603 (“Kurita”)
B-01	U.S. Patent No. 7,310,612 (“McQueen”)
B-02	U.S. Patent Application Publication No. 2003/0233422A1 (“Csaszar”)
B-03	U.S. Patent No. 7,080,139 (“Briggs”)
B-04	U.S. Patent No. 7,047,030 (“Forsyth”)
B-05	U.S. Patent No. 6,769,010 (“Knapp”)
B-06	U.S. Patent Application Publication No.

	2007/0208802 (“Barman”)
B-07	U.S. Patent Application Publication No. 2005/0177434 (“Davie”)
B-08	U.S. Patent Application Publication No. 2003/0236752 (“Dawson”)
B-09	U.S. Patent No. 6,507,865 (“Hanson”)
B-10	U.S. Patent Application Publication No. 2004/0177319 (“Horn”)
B-11	U.S. Patent Application Publication No. 2003/0103603 (“Kurita”)
B-12	U.S. Patent No. 6,377,288 (“Moran”)
B-13	U.S. Patent No. 5,826,263 (“Nakabayashi”)
B-14	U.S. Patent Application Publication No. 2008/0301237 (“Parsons”)
B-15	U.S. Patent Application Publication No. 2002/0059272A1 (“Porter”)
B-16	U.S. Patent Application Publication No. 2004/0030525A1 (“Robinson”)
B-17	U.S. Patent Application Publication No. 2004/0158455 (“Spivack”)
B-18	U.S. Patent Application Publication No. 2004/0111467 (“Willis”)
B-19	U.S. Patent No. 7,234,117 (“Zaner”)
B-20	“Konfabulator 1.0.2”
B-21	“Sametime”
B-22	Process and Relation Analysis: Capturing Architectural Thought (“Keel I”)
B-23	Knowledge Trading: Computation Support for Individual and Collaborative Sense-Making Activities (“Keel II”)
B-24	EWall Electronic Card Wall (“Winston”)
B-25	“Twine”
B-26	“Twitter”
B-27	“Lifestreams”

To the extent that a primary reference is deemed not to anticipate a claim for failing to teach or suggest one or more limitations of that claim, Meta contends that the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention in view of the prior art reference itself, as described in the attached charts.

To the extent that a primary reference is deemed not to by itself render obvious a claim for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless

have been obvious to a person of ordinary skill in the art at the time of the invention by the combination of the primary reference with one or more other primary references and/or the knowledge of someone skilled in the art disclosing the missing claim limitation. For example, a person of ordinary skill in the art would have been motivated to combine any reference in Appendices B-1 through B-27 with any other reference(s) in Appendices B-1 through B-27. Such combinations would be achieved, for example, by merely combining the disclosures described in the respective claim charts for each reference.

1. Secondary References

Appendices B-1 through B-27 provides, on a limitation-by-limitation basis, an indication of specific prior art references that disclose various limitations of the asserted claims. To the extent that a primary reference is deemed not to by itself render obvious a claim for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention by the combination of the primary reference with one or more of the references listed as disclosing that limitation in Appendices B-1 through B-27 or a similar limitation in Appendices A-1 through A-27 or C-1 through C-27.

2. Knowledge of a Person of Ordinary Skill in the Art

Appendices B-1 through B-27 provides, on a limitation-by-limitation basis, an indication of specific prior art references that disclose various limitations of the asserted claims. To the extent that a primary reference is deemed not to by itself render obvious a claim for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention based on the knowledge of a person of ordinary skill in the art at the relevant time. Specifically, as discussed in Section

IV.D, many of the limitations at the time were well-known elements and it would have been obvious to modify the primary reference to include that feature.

C. The '371 Patent

Meta contends that the primary prior art references identified below and described in the charts attached as Appendices C-1 through C-27, by themselves, anticipate the asserted claims of the '371 Patent.

Appendix	Primary References
C-01	U.S. Patent No. 7,310,612 ("McQueen")
C-02	U.S. Patent Application Publication No. 2003/0233422A1 ("Csaszar")
C-03	U.S. Patent No. 7,080,139 ("Briggs")
C-04	U.S. Patent No. 7,047,030 ("Forsyth")
C-05	U.S. Patent No. 6,769,010 ("Knapp")
C-06	U.S. Patent Application Publication No. 2007/0208802 ("Barman")
C-07	U.S. Patent Application Publication No. 2005/0177434 ("Davie")
C-08	U.S. Patent Application Publication No. 2003/0236752 ("Dawson")
C-09	U.S. Patent No. 6,507,865 ("Hanson")
C-10	U.S. Patent Application Publication No. 2004/0177319 ("Horn")
C-11	U.S. Patent Application Publication No. 2003/0103603 ("Kurita")
C-12	U.S. Patent No. 6,377,288 ("Moran")
C-13	U.S. Patent No. 5,826,263 ("Nakabayashi")
C-14	U.S. Patent Application Publication No. 2008/0301237 ("Parsons")
C-15	U.S. Patent Application Publication No. 2002/0059272A1 ("Porter")
C-16	U.S. Patent Application Publication No. 2004/0030525A1 ("Robinson")
C-17	U.S. Patent Application Publication No. 2004/0158455 ("Spivack")
C-18	U.S. Patent Application Publication No. 2004/0111467 ("Willis")
C-19	U.S. Patent No. 7,234,117 ("Zaner")
C-20	"Konfabulator 1.0.2"
C-21	"Sametime"
C-22	Process and Relation Analysis: Capturing

	Architectural Thought (“Keel I”)
C-23	Knowledge Trading: Computation Support for Individual and Collaborative Sense-Making Activities (“Keel II”)
C-24	EWall Electronic Card Wall (“Winston”)
C-25	“Twine”
C-26	“Twitter”
C-27	“Lifestreams”

To the extent that a primary reference is deemed not to anticipate a claim for failing to teach or suggest one or more limitations of that claim, Meta contends that the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention in view of the prior art reference itself, as described in the attached charts.

To the extent that a primary reference is deemed not to by itself render obvious a claim for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention by the combination of the primary reference with one or more other primary references and/or the knowledge of someone skilled in the art disclosing the missing claim limitation. For example, a person of ordinary skill in the art would have been motivated to combine any reference in Appendices C-1 through C-27 with any other reference(s) in Appendices C-1 through C-27. Such combinations would be achieved, for example, by merely combining the disclosures described in the respective claim charts for each reference.

1. Secondary References

Appendices C-1 through C-27 provides, on a limitation-by-limitation basis, an indication of specific prior art references that disclose various limitations of the asserted claims. To the extent that a primary reference is deemed not to by itself render obvious a claim for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention by the combination of

the primary reference with one or more of the references listed as disclosing that limitation in Appendices C-1 through C-27 or a similar limitation in Appendices A-1 through A-27 or B-1 through B-27.

2. Knowledge of a Person of Ordinary Skill in the Art

Appendices C-1 through C-27 provides, on a limitation-by-limitation basis, an indication of specific prior art references that disclose various limitations of the asserted claims. To the extent that a primary reference is deemed not to by itself render obvious a claim for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless have been obvious to a person of ordinary skill in the art at the time of the invention based on the knowledge of a person of ordinary skill in the art at the relevant time. Specifically, as discussed in Section IV.D, many of the limitations at the time were well-known elements and it would have been obvious to modify the primary reference to include that feature.

D. Motivations to Combine

Subject to the reservation of rights above, and based on Meta's present understanding of the asserted claims and the apparent constructions Plaintiff is applying in its Infringement Contentions, each of the prior art references identified above in Sections IV.A-C and charted in Exhibits A-C anticipate the asserted claims. To the extent a finder of fact finds that a limitation of a given claim was not disclosed by one of the references identified in Sections IV.A-C, those claims are nevertheless obvious because the asserted claims contain nothing beyond ordinary improvements. To the extent not anticipated, no asserted claim does more than combine known elements to achieve predictable results or does more than choose between clear alternatives known to those of skill in the art, particularly in view of the state of the art as reflected in the relevant references listed above in Sections IV.A-C.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination with one or more of the other references identified above in Sections IV.A-C. As explained herein and/or in the accompanying charts, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims to combine the various references cited herein so as to practice the asserted claims.

The multiple prior art references listed in Sections IV.A-C disclose all the core concepts claimed in the Asserted Patents. To the extent that Cogmedia argues that any concept claimed in the asserted patents is not disclosed in any one prior art reference, it would, at a minimum, have been obvious to adapt each reference to include the concept or combine it with other references that disclose the concept. Each concept described and claimed in the asserted patents was known to those of skill in the art as available design choices for collaborating and interacting with networked content.

The Supreme Court has held that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). “When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one.” *Id.* at 417. As the Supreme Court made clear, “[f]or the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.” *Id.*

To determine whether there is an apparent reason to combine the known elements in the fashion claimed by the patent at issue, a court can “look to interrelated teachings of multiple

patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art.” *Id.* at 418. For example, obviousness can be demonstrated by showing “there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent’s claims.” *Id.* at 420. “[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* Common sense also teaches, “familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *Id.*

However, the Supreme Court in *KSR* held that a claimed invention can be obvious even if there is no explicit teaching, suggestion, or motivation for combining the prior art to produce that invention. In summary, *KSR* holds that patents that are based on new combinations of elements or components already known in a technical field may be found to be obvious. *See, generally, KSR*, 127 S.Ct. 1727. Specifically, the Court in *KSR* rejected a rigid application of the “teaching, suggestion, or motivation [to combine]” test. *Id.* at 1741. “In determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim.” *Id.* at 1741-1742. “Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* at 1742. A key inquiry is whether the “improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* at 1740.

The rationale to combine or modify prior art references is significantly stronger when the references seek to solve the same problem, come from the same field, and correspond well to

each other. *In re Inland Steel Co.*, 265 F.3d 1354, 1362 (Fed. Cir. 2001). The Federal Circuit has held that two references may be combined as invalidating art under similar circumstances, namely “[the prior art] focus[es] on the same problem that the . . . patent addresses... Moreover, both [prior art references] come from the same field Finally, the solutions to the identified problems found in the two references correspond well.” *Id.* at 1364 (concerning patents and prior art relating to improving the magnetic and electrical properties of steel).

In view of the Supreme Court’s *KSR* decision, the PTO issued a set of Examination Guidelines. *See* Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in view of the Supreme Court Decision in *KSR International Co. v. Teleflex, Inc.*, 72 Fed. Reg. 57526 (October 10, 2007). Those Guidelines summarized the *KSR* decision, and identified various rationales for finding a claim obvious, including those based on other precedents. Those rationales include:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

(F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; and

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Id. at 57529. The above rationales likewise apply in rendering obvious the asserted claims of the Asserted Patents.

Meta specifically states the reason, suggestion, or motivation to modify or combine the references identified in Section III above in the manner claimed can be found in the explicit and/or implicit teachings of those references and the prior art as a whole, the general knowledge of those skilled in the art, including knowledge of trends in the field, and knowledge that the art is of special interest or importance in the field, and from the fact that all of the references concern the same or similar technologies. Much of the art identified above and in the attached Appendices reflects common knowledge and the state of the art prior to the priority date of the asserted patents. In many instances where a particular contention calls for, or requires, combining references, any one of a number of references can be combined. The inclusion of exemplary combinations herein does not exclude other combinations based on the claim charts attached hereto.

The references disclosed herein, alone or in combination, contain an explicit and/or implicit teaching, suggestion, motivation, or inference to combine them due to the following: (1) the knowledge generally available to a person of ordinary skill in the art; (2) the prior art references as understood by a person of ordinary skill in the art; (3) the nature of the problem to

be solved; (4) the fact that each prior art reference addresses similar problems; and (5) the knowledge of those skilled in the art that the disclosed components had been or could be used to implement various features. Meta may also rely on expert testimony to establish that the asserted claims are invalid for obviousness.

One of ordinary skill in the art would have understood how to combine the teachings of any of the above references with a reference missing such limitations and would have been motivated to pursue such combinations for numerous reasons. A strong motivation to combine references includes the common objectives and subject matter of the identified references.

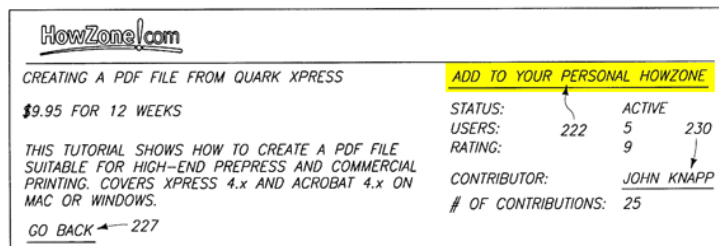
Based on all of these considerations, as further detailed in Appendices A-C (i.e., A-1 through A-27, B-1 through B-27, and C-1 through C-27), persons of ordinary skill in the art would have combined the teachings of the prior art references discussed and charted in those Appendices. The combinations of these references would have rendered obvious to one of ordinary skill in the art the subject matter of the asserted claims. The references identified in Appendices A-C are analogous prior art to the subject matter of the asserted claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of art, particularly one in which individuals in the field often shared and/or collaborated on their work, it would have been obvious for a person of skill in the art to look from one piece of prior art to another in order to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in any of these references when seeking to solve the problems purportedly addressed by the asserted patents. It would have been within the ability of a person having ordinary skill in the art (“PHOSITA”) to combine any of the references identified in Appendices A-C. A PHOSITA would have had a reasonable expectation of success combining

any of the references identified in Appendices A-C because it only involves the predictable use of prior art elements according to their established functions.

In addition, it would have been obvious to combine any of the prior art in Appendices A-C because all of these analogous art references relate to devices and methods of using well-known methods for collaborating and interacting with networked content, for example by voting, commenting, etc., as well as other limitations disclosed in the asserted claims, in routine and predictable ways.

For example, and as discussed further below, the Asserted Patents generally require the use of collaborating and interacting with networked content, which by April 2004 was commonplace in the art and largely interchangeable for use in various networked systems. A POSITA would thus be motivated to look at various commercial or known networked systems for further collaborating and interacting with networked content. *See also infra* Section IV.D.1-2 (Well-Known Elements in the Art).

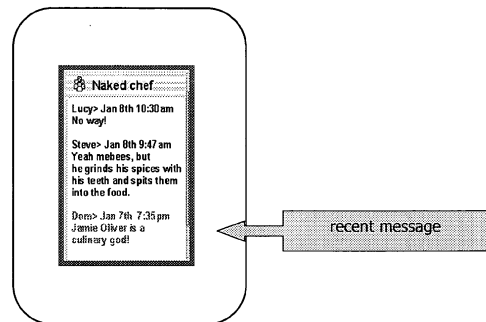
As another example, U.S. Patent No. 6,769,010 to Knapp et al. (“Knapp”) teaches copying a GUI object to a user’s personal page via a graphically entered copy command. Knapp, 23:36-24:3, 25:31-56, 28:31-44. A user may click an “add to personal HowZone” link to duplicate a third-party content object into their own personalized digital space. Knapp, 23:36-24:3, 25:31-56, 28:31-44, 6:53-7:2, FIGs. 9, 12, 17.



Knapp, FIG. 17 (annotated).

As another example, U.S. Patent No. 7,047,030 to Forsyth (“Forsyth”) discloses systems

and methods for facilitating group communications. *See, e.g.*, Forsyth, 1:15-23, 3:2-18, 6:27-52. “Forums” structure user interactions about social events, topics, pictures, common interests, book/music recommendations, etc. Forsyth, 5:27-30, 7:19-43, 9:36-45, 10:14-19. Like McQueen’s “Discuss” link for a blurb (McQueen, FIG. 4) Forsyth discloses that users can access a discussion Forum by clicking on a link. Forsyth, 6:27-52, FIG. 7.



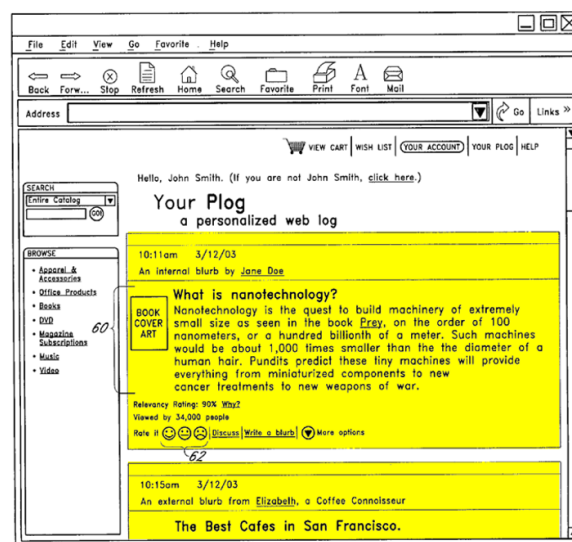
Forsyth, FIG. 7.

As another example, U.S. Patent App. No. 2007/0208802 (“Barman”) teaches a client and server in communication using a dual communication link, and a markup language based instant messaging application is disclosed. Barman, Abstract, Brief Summary of the Invention. The instant messaging application may include group instant messaging, and the instant messaging application may also provide group member persistence and message persistence at the server. Barman, Abstract, Brief Summary of the Invention. A card based web application is disclosed where the card information and character may be shared with other users or within a group, and the cards may also be configurable by users. Barman, Abstract, Brief Summary of the Invention.

For example, U.S. Patent App. Pub. No. 2004/0158455 (“Spivack”) teaches “[a] data construct referred to as a semcard,” which “is a semantic (meaning-based) software object comprised of semantic meta-tags and meta-data that describes a target object or thing. A target

object can be any type of digital or physical entity or identifier, or it can be tacit knowledge, such as ideas, concepts, processes or other data existing in a user's mind, provided that the user represents this knowledge in the semcard.” Spivack, Abstract, Summary of the Invention. “A collection of semcards represents a knowledge network; single semcards, as well as knowledge networks, can be browsed, shared, searched, disseminated, manipulated, displayed, organized, and stored as desired by the individual users of the semcard or knowledge network having a semcard management application or browsing software on their computational devices. Semcards can also represent relationships between users or, more generally, people and entities.” Spivack, Abstract, Summary of the Invention.

As another example, U.S. Patent No. 7,310,612 to McQueen, III et al. (“McQueen”) ingests content from various “external sources”—such as newsletters, blogs, or RSS feeds—and saves corresponding “blurbs” within a database 44. McQueen, 4:53-5:3, 1:54-63, FIG. 1. Blurbs can be browsed and may include a title, relevant graphics, and a hyperlink, as well as a variety of interactive features (e.g., voting icons 62, a “Discuss” link). McQueen, 5:52-6:3, 7:55-64, 8:4-16, FIG. 4.



McQueen, FIG. 4.

As another example, U.S. Patent App. No. 2008/0301237 (“Parsons”) teaches a payload comprising content, such as multimedia, or references to content, which may be provided with further elements, such as a title or initial comments. Parsons, Abstract, Objects and Summary of the Invention. The payload may be sent to any contact of the user, and upon receipt by other users, the payload may be forwarded to any of the others’ immediate contacts. Parsons, Abstract, Objects and Summary of the Invention. Comments can be made by anyone in receipt of the payload for others in receipt of the payload to view. Parsons, Abstract, Objects and Summary of the Invention. Parsons teaches a social networking mechanism wherein a record is made for each forwarding of a payload and introductions can be made between individuals lying in the same forwarding chain of a payload. Parsons, Abstract, Objects and Summary of the Invention. Immediate contacts can be collected into groups for ease in addressing, and teams of users can send and forward messages among themselves or to others outside of the team, according to predetermined rules and individuals’ standing within the team. Parsons, Abstract, Objects and Summary of the Invention. Users are provided with a sortable, filterable list of payloads sent to them, and a thumbnail of each payload is provided to allow a user the opportunity to quickly assess the nature of the content. Parsons, Abstract, Objects and Summary of the Invention. Payloads and invitations to join may be sent to people outside the system via email or as an instant message. Parsons, Abstract, Objects and Summary of the Invention.

As another example, U.S. Patent No. 6,377,288 (“Moran”) teaches domain objects for use in a freeform graphics system. Moran, Abstract, Summary. Domain objects are context specific representations of information that are used in a freeform graphics system, and are represented in a freeform graphics system by a graphic object (icon) representing an instance of the domain object. Moran, Abstract, Summary. The icon representing a domain object may be

manipulated like any other graphic object, and domain objects are defined by a domain object class which define attributes, a set of action rules and layouts. Moran, Abstract, Summary. The attributes describe the information or data associated with the domain object. The set of action rules map user actions and system events to operations that may be performed on the domain object. The layouts define how domain object information is displayed as an icon. The attributes may have computed values. Moran, Abstract, Summary.

As another example, U.S. Patent No. 7,234,117 (“Zaner”) teaches an application and user interface for facilitating group interactions over a network integrates messaging, file sharing, media playing, journaling, profiles, and gaming into a cohesive environment. Zaner, Abstract, Summary of the Invention. The groups are persistent and mobile in that a user does not have to recollect and reconfigure the group each time he or she wants to interact with the group online and, while online, the group may be taken from one activity to another without having to disband and reconnect at the second activity. Zaner, Abstract, Summary of the Invention. The application is modular so as to be extensible to include other activities and functionalities, and the group interaction application utilizes a peer-to-peer network environment to facilitate network communications between group members. Zaner, Abstract, Summary of the Invention.

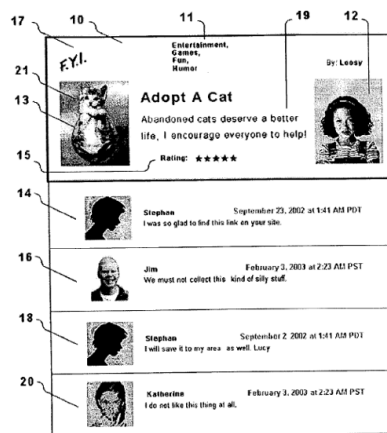
As another example, U.S. Patent App. Pub. No. 2003/0103603 (“Kurita”) teaches a method for communication making a processing by means of one (or a combination) of the information units or a combination of the information units when it is instructed from a user terminal to display contents and procedure of a communication or to totalize contents of the communication, or when it is instructed from a manager terminal of a field of the communication to provide a function of the communication corresponding to an object or stage of the communication, the processing corresponding to the instruction. Kurita, Abstract, Summary of

the Invention. Information units making contents of the communication include cards as an example, and information units making premising information of a communication and a basis of the communication include boards as an example. Kurita, Abstract, Summary of the Invention. Information of a board as an information unit comprises a board identifier and attribute information for specifying a function of a board such as a relationship between the board and cards. Kurita, Abstract, Summary of the Invention. Also, in order to provide a communication function corresponding to an object and stage of the communication, there is provided a template conformed to the object and stage so that a manager can select and utilize the template. Kurita, Abstract, Summary of the Invention.

As another example, U.S. Patent No. 6,507,865 (“Hanson”) teaches a method and system that can be used to support content collaboration among a group of participants connected to a network. Hanson, Abstract, Summary of the Invention. A participant creates an electronic form specifying the content and a list of network addresses corresponding to other participants in the content collaboration. Hanson, Abstract, Summary of the Invention. A server receives the form and includes resources for delivering an electronic mail message associated with an electronic medium associated with the content collaboration. Hanson, Abstract, Summary of the Invention. When the participant opens the message, the electronic medium is produced by the server that includes static and dynamic regions. Hanson, Abstract, Summary of the Invention. The participant can modify or change the content, and the dynamic regions are asynchronously updated in the server and indicate the current content of the electronic medium that can be accessed by other participants. Hanson, Abstract, Summary of the Invention.

As another example, U.S. Patent Pub. No. 2003/0233422 to Csaszar et al. (“Csaszar”) discloses “Flyers” (like McQueen’s blurb posts) such as the one illustrated below in Figure 7.

Csaszar, [0211-0212], claim 1. A user is shown the option to “MAKE FLYER” when moving a cursor over a web page. Csaszar, [0243]-[0247].



Csaszar, FIG. 7.

As another example, U.S. Patent App. Pub. No. 2005/0177434 (“Davie”) teaches a system for organizing and marketing creative content over an online medium. Davie, Abstract, Summary. The system organizes content into “content cards” – electronic representations of collectable cards. Davie, Abstract, Summary. Cards are distributed through a configurable distribution system which takes factors such as the user’s personal preferences and the aggregate popularity of cards into account. Davie, Abstract, Summary. The cards are sent over a network such as the Internet and are rendered for the user, and a content card allows a user to sample content and purchase related products directly from the card. Davie, Abstract, Summary. The system has an extensive provision for interpreting user reactions to content and modifying the popularity of content cards, both as they relate to a specific user, and in their overall popularity. Davie, Abstract, Summary.

As another example, U.S. Patent No. 5,826,263 (“Nakabayashi”) teaches a data management system applicable, for example, to management of name cards. In management of name cards, name card data (101) includes a plurality of name card records (100). Nakabayashi,

Abstract, Summary of the Invention. A card summary record (110, 112) prepared as title data includes a card ID and part of item data included in each name card record (100). Nakabayashi, Abstract, Summary of the Invention. Each summarized card data (111, 113) includes a plurality of card summary records (110, 112) collected according to a predetermined condition, and is placed into a certain card box (120, 121). Nakabayashi, Abstract, Summary of the Invention. Each card box has a characteristic name such as 'business' or 'private', and visually hierarchical display of data in the form of a card box list, a target list including a plurality of target data, and individual name card data helps the user clearly understand the whole data display and data retrieval, which allows quick access to a desired name card. Nakabayashi, Abstract, Summary of the Invention. The target list is data having a fixed length and used on a memory, thereby realizing high-speed data retrieval and display. The system further includes a data maintenance mechanism and an auto-dialing mechanism. Nakabayashi, Abstract, Summary of the Invention.

As another example, U.S. Patent App. Pub. No. 2003/0236752 ("Dawson") teaches a method and system for selling goods and/or services over a communication network, which provides a compilation of digital images that visually represent the goods and/or services to be sold. Dawson, Abstract, Summary of the Invention. The digital images are forwarded the compilation to a requesting user over a communication network for presentation to the requesting user on a display device in a presentation format that still allows use of the display device for continued operation of other applications on the requesting user's device. Dawson, Abstract, Summary of the Invention.

As another example, U.S. Patent App. Pub. No. 2004/0177319 ("Horn") teaches a computer data processing system that includes a central processing unit configured with a integrated computer control software system for the management of data objects including

dynamic and automatic organization, linking, finding, cross-referencing, viewing and retrieval of multiple objects regardless of nature or source. Horn, Abstract, Summary, Including Objects and Advantages of the Invention. The system provides underlying component architecture having an object-oriented database structure and a metadata database structure for storing only one instance of each object while linking the object to multiple collections and domains by unique metadata links for the grouping into and retrieval from any of the collections. Horn, Abstract, Summary, Including Objects and Advantages of the Invention. The system employs configurable, extensible attribute/properties of data objects in metadata format, and a truly user-friendly configurable interface that facilitates faster, more unified, comprehensive, useful and meaningful information management. Horn, Abstract, Summary, Including Objects and Advantages of the Invention. Additional features include a sticky path object hierarchy viewing system, key phrase linking, viewing by reference, and drag-and-drop relationship link creation. Horn, Abstract, Summary, Including Objects and Advantages of the Invention.

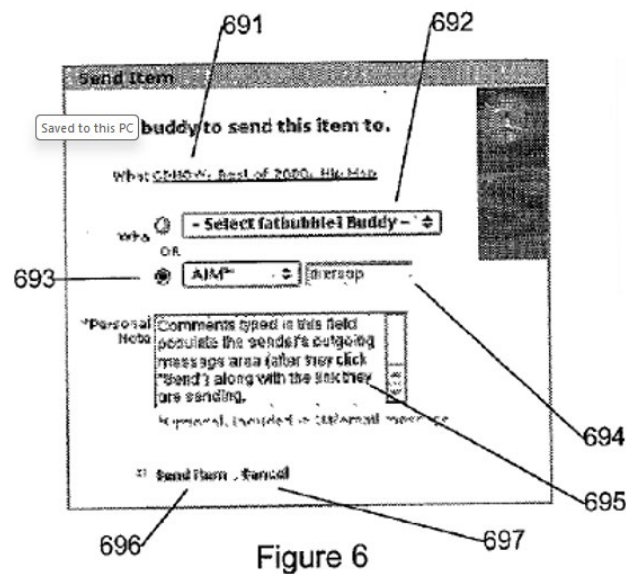
As another example, U.S. Patent App. Pub. No. 2002/0059272 (“Porter”) teaches a computerized method (practiced on line, such as in a client-server environment) of collaboratively ordering information, including storing a plurality of information nodes; enabling a user to give an ordinal rank to a nodes under a parent node; ranking nodes under their parent node as a function of the ordinal ranking given to them by each of a group of users; and displaying nodes under their parent ordered by such rankings. Porter, Abstract, Summary of the Invention. The nodes can be statements about a subject, articles, multimedia presentations, suggestions about other nodes, discussion threads, URLs, advertisements, etc, and a user can select to see nodes ordered by the rankings given them by different sets of users. Porter, Abstract, Summary of the Invention. Nodes can be ranked under a parent node, and parent nodes can be ranked under

other parent nodes, and the same node can have different rankings under different parent nodes. Porter, Abstract, Summary of the Invention. A user can view the hierarchy of nodes with select parent nodes having their child nodes displayed, and a user can alternatively select to view nodes ordered by other criteria including: date of creation; number of non-ordinal votes received, amount or type of user activity association with node, and amount or type of change associated with the node in a given time. Porter, Abstract, Summary of the Invention. Desired nodes are made easier to find with searching tools and/or indexing, and Porter provides tools for collaboratively editing nodes or verifying their contents. Porter, Abstract, Summary of the Invention.

As another example, U.S. Patent App. Pub. No. 2004/0030525 (“Robinson”) teaches a network-based computer system that organizes representations of information provided by users known as Deeds, wherein Deeds represent different versions of the same document, which includes communication such that a Topic may have a plurality of associated Deeds. Robinson, Abstract, Summary of the Invention. The system provides any of a plurality of users the ability to create a new Deed by cloning, during which selected data is inherited from an existing Deed. Robinson, Abstract, Summary of the Invention. The system provides a plurality of users with the ability to rate Deeds, at any point in time. One Deed associated with a given Topic is considered to be the Current Best. The system makes the Current Best more readily viewable than other Deeds associated with the Topic. The system combines expressions of opinion of a plurality of users to determine the Current Best. Robinson, Abstract, Summary of the Invention.

As another example, U.S. Patent No. 7,080,139 to Briggs et al. (“Briggs”) teaches tracking a user’s online activity. Briggs, 2:50-55. Collected data may also be annotated and reported “with a history of users who forwarded the information.” Briggs, 19:25-36. Briggs

further teaches selectively sharing data via graphical selections and corresponding user interfaces. Briggs, 9:55-57, FIG. 6.



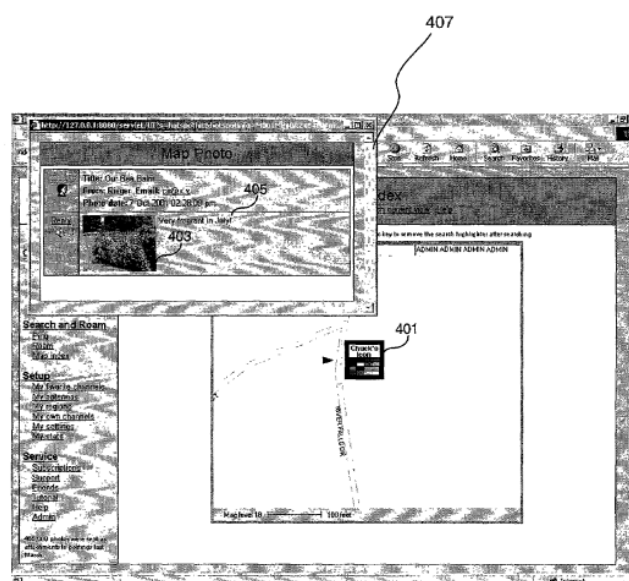
Briggs, Fig. 6.

As another example, U.S. Patent No. 7,234,117 (“Zaner”) teaches an application and user interface for facilitating group interactions over a network integrates messaging, file sharing, media playing, journaling, profiles, and gaming into a cohesive environment. Zaner, Abstract, Summary of the Invention. The groups are persistent and mobile in that a user does not have to recollect and reconfigure the group each time he or she wants to interact with the group online and, while online, the group may be taken from one activity to another without having to disband and reconnect at the second activity. Zaner, Abstract, Summary of the Invention. The application is modular so as to be extensible to include other activities and functionalities. The group interaction application utilizes a peer-to-peer network environment to facilitate network communications between group members. Zaner, Abstract, Summary of the Invention.

As another example, U.S. Patent App. Pub. No. 2004/0111467 (“Willis”) teaches systems for providing content to multiple users are described, where the systems identify individual

content elements within the content, and provide a discussion forum linked to each of the content elements. Willis, Abstract, Summary. As one of the users views the content and associated content elements, the user has the option of selecting a particular content element, so as to interact with its associated discussion forum. Thus, multiple users may become viewers or members of a particular discussion forum. Willis, Abstract, Summary. The content element associated with a given discussion forum may be included in various pieces of content within the system, such as in multiple articles or email messages. Willis, Abstract, Summary. However, users viewing the content elements in any particular setting are all directed to the common discussion forum. In this way, users interested in a particular topic are brought together in a convenient way, without much action required by the users. Willis, Abstract, Summary.

As another example, U.S. Patent No. 7,136,915 to Rieger (“Rieger”) discloses that a user can browse and receive “geographically relevant postings” in an outlined region. Rieger, Abstract. When a user selects a post on a map, Rieger’s system “displays the photo 403, its message 405, and any supporting elements, typically in a pop-up browser window.” Rieger, 13:26-30, Fig. 4.



Rieger, Fig. 4.

As another example, Arlo Rose and Perry Clarke's software system was released on March 1, 2003 entitled Konfabulator 1.0.2. The system provides a JavaScript runtime engine for Mac OS X that allows users to run specialized information objects called widgets. The system demonstrates how computer processes may be used to fetch and display data, such as stock quotes, weather, and calendars, without the constraints of traditional window borders. The capabilities considered include viewing system status, editing information lists, and organizing data items through a customizable graphical interface.

As another example, IBM Lotus Software's collaboration system called Sametime was available as of 2002. The system provides a client-server application and middleware platform for real-time unified communications. The system analyzes and facilitates various forms of interaction, such as broadcasting meeting data and rendering web pages accessible within shared digital environments. The activities considered are enterprise instant messaging, online conferencing, screen sharing, and the utilization of interactive whiteboards for collaborative knowledge management.

As another example, Paul Erich Keel's dissertation was published on October 20, 2004. The dissertation is entitled: Knowledge Trading: Computational Support for Individual and Collaborative Sense-Making Activities. The dissertation analyzes various human mental processes involved in the determination of possible relations among data items such as documents on a work desk or files in a computer system. The dissertation proposes a computational equivalent for these mental processes and demonstrates how computer systems may be used to prioritize the data exchange between collaborating users, and visualize data in various ways.

As another example, Paul E. Keel's Master of Science in Architectural Studies thesis was published on March 26, 1997. The thesis is entitled: Process and Relation Analysis: Capturing Architectural Thought. The thesis investigates an electronic version of a shared knowledge base. The electronic version discussed provides capabilities for remote collaboration, ease of storage and manipulation of ideas.

As another example, Patrick Winston's EWall presentation at the Collaboration and Knowledge Management Workshop was presented in Adelphi, Maryland on January 14-16, 2003. The presentation was entitled EWall: Electronic Card Wall. The presentation discusses the development of a prototype for five proposed software modules representing five essential activities in collaboration and knowledge management. The activities considered are collecting and organizing information, evaluating and tracking information, storing and retrieving information, exchanging information, and viewing information.

As another example, Nova Spivack's semantic web application Twine was demonstrated on December 12, 2007. The application investigates a method for organizing and sharing information through a semantic knowledge network. The application demonstrates how software agents may be used to scour resources, automatically extract metadata, and infer relationships between data items such as documents, videos, and contacts. The essential activities in knowledge management considered are collecting online content, sharing information through specialized collections, and discovering new content via automated recommendations.

As another example, Twitter's software system was published and made publicly available by at least 2006. The system analyzes a method for friends and coworkers to communicate through the exchange of brief, frequent status updates. The system demonstrates how individual data items may be configured into distinct information objects, featuring

extracted data such as pictures, headings, and links. The activities considered are posting and exchanging time-stamped messages, creating user-selected collections of data objects, and providing graphical access to messaging and linking functions.

As another example, Eric Thomas Freeman and David Gelernter's work on the Lifestreams software system was published and made publicly available by at least 1997. Lifestreams considers the limitations of the desktop metaphor and proposes a storage model based on a chronologically ordered stream of documents. The system demonstrates how computer processes may be used to manage personal electronic information without the need for explicit filing or naming by utilizing dynamic virtual directories known as substreams. The essential activities in information management considered are locating and organizing information, summarizing document collections into overviews, monitoring data with autonomous software agents, and exchanging information between collaborating users.

Numerous additional prior art references, including those identified in the attached Appendices, reflect common knowledge and the state of the prior art before the earliest claimed effective filing date of the asserted patents. As it would be unduly burdensome to create detailed claim charts for all of the invalidating combinations, for at least the reasons described in these initial invalidity contentions, it would have been obvious to one of ordinary skill in the art to combine any of a number of prior art references, including any combination of those identified in the attached Appendices, to meet the limitations of the asserted claims. Meta's inclusion of exemplary combinations, in view of the factors and exemplary motivations to combine identified herein, does not preclude Meta from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the

references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 550 U.S. at 415 (rejecting the Federal Circuit’s “rigid” application of the teaching, suggestion, or motivation to combine test, instead espousing an “expansive and flexible” approach). Indeed, the Supreme Court held that a person of ordinary skill in the art is “a person of ordinary creativity, not an automaton” and “in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *Id.* at 420. Nevertheless, in addition to the information contained herein, Meta hereby identifies additional motivations and reasons to combine the cited art.

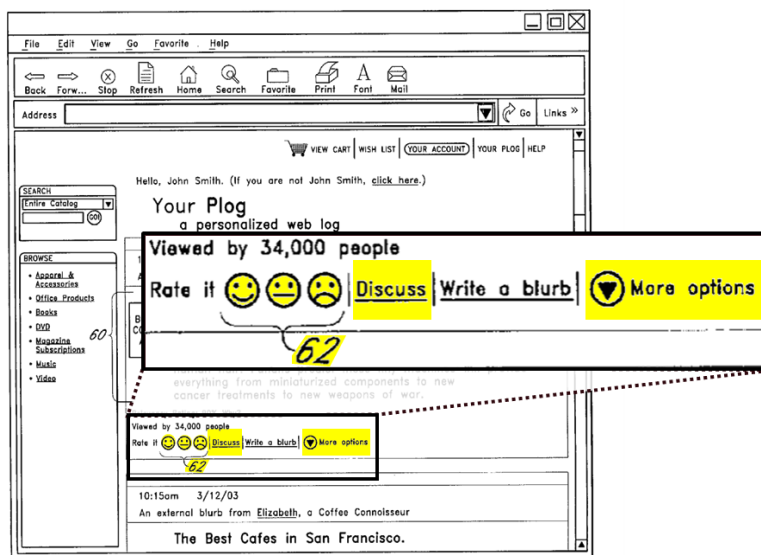
McQueen and Forsyth: As an example, and without limitation, it would have been obvious to a PHOSITA to combine the teachings of McQueen and Forsyth². McQueen and Forsyth are in the same field of endeavor. A PHOSITA would have been motivated to modify McQueen to incorporate Forsyth’s instant messaging, new message count, and related features. It would have been within the ability of a PHOSITA to combine them. A PHOSITA would have had a reasonable expectation of success combining McQueen and Forsyth because it only involves the predictable use of prior art elements according to their established functions.

It would have been obvious to a POSITA to modify McQueen to incorporate Forsyth’s instant messaging, new message count, and related features. It also would have been obvious for McQueen’s blurb posts to display a “current tally of the votes submitted on a particular review,” as McQueen discloses and a “typical” configuration at the relevant time. *See McQueen*, 1:34-53.

² Any reference to the obviousness to combine the teachings of two prior art references (e.g., McQueen and Forsyth) should not be interpreted to foreclose other combinations (e.g., McQueen, alone or in combination with another reference(s), in combination with Forsyth, alone or in combination with another reference(s)).

The combination would have resulted in McQueen’s blurb posts including an instant messaging function and a corresponding blurb discussion forum, along with indicators for the number of new messages, and votes.

A POSITA would have had ample reason to combine McQueen and Forsyth. McQueen already seeks to facilitate user interaction by including voting icons 62, a “More options” drop-down menu, and a “Discuss” element. McQueen, FIG. 4, 8:24-33.



McQueen, FIG. 4 (annotated). Incorporating Forsyth’s “chat/instant messaging” aspects, which were a “current and very popular internet type service,” Forsyth, 5:3-14; 5:27-43, for McQueen’s “Discuss” feature or as an additional aspect of McQueen’s “More options” drop-down menu would have been an obvious and predictable combination of known elements for known improvements and/or benefits. See *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 415-421 (2007).

A POSITA would have recognized that implementing the discussion feature as an instant messaging or chat function would have enhanced user experience with the blurbs by allowing for real-time, dynamic interaction between mobile devices. Forsyth, FIGs. 1, 6-7, 2:40-53, 5:8-26, 6:27-57. This would have “handle[d] effectively” the communications McQueen suggests.

Forsyth, 2:40-47. It would have offered group, push, and threaded conversation benefits over state-of-the-art technology like web bulletins and group e-mail. *Id.*, FIG. 1 (below).

Capability:	Can you create a discussion between group members on your own device? (Important since it facilitates setting up a group discussion)	Push delivery? (Push is more convenient to mobile users)	Is it possible to retain a long term record of exchanges between group members? (An important attribute for many new kinds of services)	Can you deliver messages to all members of a group, or is it restricted to one to one? (Clearly critical to group based messaging)	Do all group members see the same, unitary message thread, or are there instead many separate individual messages? (A single, unitary message entity (e.g. a thread) makes message organisation and navigation far easier.)	If a recipient is off-line (e.g. messaging app not open), are they alerted anyway? Potentially very important for mobile usage because of the high proportion of time users may not be on-line (i.e. actively using their messaging application).
Web bulletin board	No	No	Yes	Yes	Yes	No
Chat/instant messaging	Yes	Yes	No	Yes	Awkward	No
Group e-mail	Yes	No	Awkward	Yes	No	No
SMS	Awkward	Yes	No	Awkward	No	Yes
Forums	Yes	Yes	Yes	Yes	Yes	Yes

The communications would have made it “far easier for people to reach similar individuals than ever before,” providing a “foundation stone for building applications which enable a huge range of new group based communication/interaction functions” and increasing user social engagement and collaboration. *Id.*, 3:3-18. Indeed, Forsyth explicitly describes the advantages offered by providing an “easy to understand messaging tool that facilitates open discussion.” Forsyth, 5:27-30.

Displaying a number of new messages associated with a discussion would have helped the user understand if new messages existed for increased convenience and usability. Forsyth, 6:28-36. Such new message indicators were helpful and ubiquitous before the alleged time of invention. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art).

A POSITA also would have had good reason to modify McQueen to display the number of votes for a given blurb. McQueen discloses that a set of “icons 62 for voting on [a] blurb,” with the system tracking “the total number of votes cast on such blurbs,” and that “[a] current tally of the votes submitted on a particular review is typically displayed to assist readers in assessing the review.” McQueen, 1:32-43, 6:42-45, 8:17-24, FIG. 4. Displaying the number of votes for user-generated content, such as McQueen’s blurb posts, would have assisted readers in assessing the blurb and any corresponding review. *Id.* The vote display would have allowed a user to “take into consideration the reputation of the associated reviewer.” McQueen, 1:32-43. In all, it would have been an obvious and predictable combination of known elements for known improvements and/or benefits. *KSR*, 550 U.S. at 415-421.

Users faced a high volume of information in such a system designed to aggregate large amounts of content via RSS feeds, etc. McQueen, 4:53-58. Displaying a vote indicator would have provided an immediate visual metric of quality or popularity, enabling users to quickly distinguish between “good” and “poor” content without opening or reading every individual blurb. McQueen, 6:14-30.

By the early 2000s, such total vote displays were standardized, boosted user engagement, and simplified content navigation. A POSITA would have appreciated that showing a “total vote tally,” U.S. Patent Pub. No. 2002/0069105 (“do Rosario Botelho”), [0050], would have provided immediate social information, allowing users to instantly gauge post popularity. Such an indicator also would have helped users filter through noise; by highlighting “more popular proposals,” such systems “increase the likelihood” that the most relevant and helpful content is prioritized and considered. *See, e.g.*, U.S. Patent Pub. No. 2003/0189592 (“Boresjo”), [0055].

A POSITA would have had a reasonable expectation of success modifying McQueen. Forsyth's communication features allowed "access[] by different applications ... for a wide variety of purposes—whenever an application designer wishes to include" such communication features. Forsyth, 5:55-60. Forsyth's communication features thus would have been readily applicable to McQueen, which can operate with any "web site, an online services network, or any other type of multi-user system," McQueen, 7:38-45; integration would have been a routine exercise in database and/or GUI design and/or software integration.

Moreover, group messaging was a "current and very popular" service at the time. Forsyth, 5:7-14. Vote tally display features were conventional and "typical." McQueen, 1:32-43. The protocols and programming techniques required to implement such chat interfaces or message threads were well-known standard practices. Thus, the combined system would have been a predictable combination of known components according to known methods (*e.g.*, communication and GUI methods), and would have produced predictable display and communication results. *KSR*, 550 U.S. at 416.

McQueen and Csaszar: As an example, and without limitation, it would have been obvious to a PHOSITA to combine the teachings of McQueen and Csaszar. McQueen and Csaszar are in the same field of endeavor. A PHOSITA would have been motivated to modify McQueen to incorporate Csaszar's one-click mechanism for converting a web page into an internet post. It would have been within the ability of a PHOSITA to combine them. A PHOSITA would have had a reasonable expectation of success combining McQueen and Csaszar because it only involves the predictable use of prior art elements according to their established functions.

A POSITA would have been motivated to modify McQueen’s blurb and blog publishing system and method with Csaszar’s one-click mechanism for converting a web page into an internet post. Implementing Csaszar’s features would have reduced the amount of effort and time needed to create McQueen’s blurb posts by “automatically captur[ing]” the appropriate title, heading, description element, image, etc. from a web page. Csaszar, [0014], [0243]-[0247], FIG. 7; McQueen, FIG. 4. Such streamlining would have increased the usability and reach of the McQueen system. Csaszar, [0014], [0243]-[0247], FIG. 7. Csaszar’s functionality for capturing information in a uniform format also would have increased readability and user experience. McQueen, FIG. 4, 8:24-33; Csaszar, [0044].

Integrating Csaszar’s capture trigger with McQueen’s blurb posting system would have been a straightforward application of known programming techniques, allowing users to “enable greater efficiency to experience and exchange information.” Csaszar, [0044], [0053]; *see KSR*, 550 U.S. at 415-421.

A POSITA would have had a reasonable expectation of success in implementing Csaszar’s teachings in McQueen. Both McQueen and Csaszar use a centralized server-side database to store digital objects for client-side retrieval, such that Csaszar’s capture trigger with McQueen’s display templates would be a straightforward application of known programming techniques. Csaszar, [0125-0130], [0244]; McQueen, 4:29-5:33. Both describe similar uniform objects including headings, pictures, and links, such that integration into a single interface would have been within the technical skill of a POSITA. McQueen, 8:4-16; Csaszar, [0126]. Thus, the system and method would have been a predictable combination of known components according to known methods (*e.g.*, communication and GUI methods) and would have produced predictable display and communication results. *KSR*, 550 U.S. at 416.

McQueen and Briggs: As an example, and without limitation, it would have been obvious to a PHOSITA to combine the teachings of McQueen and Briggs. McQueen and Briggs are in the same field of endeavor. A PHOSITA would have been motivated to incorporate Briggs' reporting and information-tracing features. It would have been within the ability of a PHOSITA to combine them. A PHOSITA would have had a reasonable expectation of success combining McQueen and Briggs because it only involves the predictable use of prior art elements according to their established functions.

A POSITA would have been motivated to modify McQueen to incorporate Briggs' reporting and information-tracing features. A POSITA would have recognized that implementing Briggs' reporting teachings (e.g., on tracking "velocity," "diffusion," and "spreading of information") in the system and method would have significantly enhanced a user's understanding of social influence and weight of posts, a helpful addition to McQueen that allows users to publish content and "forward" or "send" blurbs. Briggs, 5:30-32, 8:24-33, 9:25-27, 10:36-47, 19:5-36; McQueen, FIGs. 2-4. Incorporating Briggs' teachings similarly would have allowed users to know whether a given post could be trusted based on who forwarded the information. Briggs, 9:25-27, 19:31-36.

Further, a POSITA would have been motivated to implement Briggs' instant messaging and object sharing teachings in McQueen. For instance, a POSITA would have appreciated that including Briggs' GUI and selection logic for an internet object in McQueen would have provided an easy and efficient method for graphically selecting specific information to share with recipients, thereby enhancing user experience. Briggs, 7:37-55, 9:16-57, FIG. 6. Indeed, Briggs' automated method of "evoking [a] user's IM tool" would be an integrated and efficient bridge between the information object viewing taught by McQueen and its suggestion for sharing and forwarding such

content. Briggs, FIGs. 6, 19, 15:9-13; McQueen, FIG. 4, 8:25-33, 10:38-47. A POSITA also would have recognized that adopting Briggs' teachings would have improved the user experience by enabling selected information to be shared more clearly and easily. Briggs, 7:37-55, 9:15-57, FIG. 6.

In all, the modifications would have been obvious and predictable combinations of known elements for known improvements and/or benefits. *See KSR*, 550 U.S. at 415-421.

A POSITA would have had a reasonable expectation of success in combining McQueen with Briggs. The disclosures utilize similar and combinable object-oriented data structures to manage digital content; they disclose combinable centralized server-side database teachings for storing digital objects for client-side retrieval. McQueen, 1:13-22, FIG. 1; Forsyth, 2:17-24; Briggs, 2:45-49. Briggs' teachings on "forwarding history" or calculating "velocity" would have been understood, standard implementations for software developers at the time. Briggs, 19:25-27, 19:31-36. Briggs details one potential implementation or aspect of McQueen's share/forwarding feature, confirming that the two technologies were compatible. Briggs, 19:22-46, FIG. 6.

Thus, the system and method would have been a predictable combination of known components according to known methods (*e.g.*, data collection, communication, and GUI methods) and would have produced predictable display and communication results. *KSR*, 550 U.S. at 416.

McQueen and Colas: As an example, and without limitation, it would have been obvious to a PHOSITA to combine the teachings of McQueen and Colas. McQueen and Colas are in the same field of endeavor. A PHOSITA would have been motivated to incorporate Colas' techniques for using online pages to post advertisements or other blurbs including location indicators. It would have been within the ability of a PHOSITA to combine them. A PHOSITA

would have had a reasonable expectation of success combining McQueen and Colas because it only involves the predictable use of prior art elements according to their established functions.

A POSITA would have been motivated to modify McQueen to incorporate Colas's techniques for using online pages to post advertisements or other blurbs including location indicators. For instance, a POSITA would have appreciated that including such advertisements in an author's blog page would have allowed the author to generate revenue for his or her business (e.g., a real-estate business), a complementary function to McQueen's system, which already contemplates online catalog applications. Colas, [0002]-[0003], [0008]; McQueen, Abstract, FIGs. 1, 4, 1:54-63.

A POSITA also would have appreciated that including a uniform location indication on a post as described by Colas would have increased the effectiveness and engagement of McQueen's posts by allowing users to see if the post is relevant to them, close by, etc. Colas, [0121]-[0122], FIGs. 4A, 10A-B, 11A, 12A, 13, 24A-B. Incorporation of the Colas features also would have helped sales professionals better maintain and control their advertising and online outreach. Colas, [0094]-[0095]. A user could easily manage when and how such a post is published and timed. Colas, [0016], [0110]-[0111] ("ad run period"), [0132], [0244]. In all, the modification would have been an obvious and predictable combination of known elements for known improvements and/or benefits. *See KSR*, 550 U.S. at 415-421.

A POSITA would have had a reasonable expectation of success in combining McQueen with Colas. The disclosures describe using discrete digital objects and storing similar titles, images, and links, and such known combinations and required software implementations would have been predictable and well within a POSITA's skill. *See also, e.g.*, McQueen, FIGs. 1, 4; Forsyth, 4:15-17; Colas, FIGs. 4A, 10A-B, 11A, 12A, 13, 24A-B. Colas details that its techniques

were applicable to “on-line catalogs, yellow pages,” other online platforms, and “any electronic ... media that can support perusing of ads by potential purchasers,” Colas, [0003], [0018], [0097], including McQueen’s online pages that a user can browse. McQueen, FIG. 4. Such a system and method would have been a predictable combination of known components according to known methods (*e.g.*, advertisement, communication, and GUI methods), and would have produced predictable display results. *KSR*, 550 U.S. at 416.

McQueen and Rieger: As an example, and without limitation, it would have been obvious to a PHOSITA to combine the teachings of McQueen and Rieger. McQueen and Rieger are in the same field of endeavor. A PHOSITA would have been motivated to modify McQueen to incorporate Rieger’s technique for illustrating the location of online posts on a map. It would have been within the ability of a PHOSITA to combine them. A PHOSITA would have had a reasonable expectation of success combining McQueen and Rieger because it only involves the predictable use of prior art elements according to their established functions.

A POSITA would have been motivated to modify McQueen to incorporate Rieger’s technique for illustrating the location of online posts on a map. For instance, a POSITA would have recognized that Rieger’s “geographically relevant postings” would enhance user experience by allowing users to see the physical “point of relevance” for the information being shared and search for relevant posts based on location. *See Rieger*, 1:25-34, Fig. 4 (exemplary illustration of a map and posts for user), FIG. 11, 1:62-65, 2:39-43, 4:4-14, 13:1-31, 24:4-28. Moreover, a POSITA would have recognized that Rieger’s functionality would help facilitate the community-based interactions that McQueen and Forsyth seek to provide by better enabling dialog options between users for specific groups, etc. and enabling more geographically relevant information to be provided to particular populations. *Rieger*, 2:9-27, 4:4-14, 16:36-48, Abstract.

A POSITA also would have recognized that implementing Rieger's teachings also would have better linked McQueen's "blurb" sharing based on location to better target certain posts and/or advertisements. McQueen, 1:64-2:16 (describing targeted posts for users); Rieger, Abstract (describing location-based posts for users). McQueen contemplates that users can be targeted with blurbs based on locations and Rieger discloses a helpful way to target users with posts by dynamically defining the target area. Rieger, 1:53-57, 2:1-7, 21:11-22:6, FIG. 7B. In all, the modification would have been an obvious and predictable combination of known elements for known improvements and/or benefits. *See KSR*, 550 U.S. at 415-421.

A POSITA would have had a reasonable expectation of success in combining McQueen with Rieger. The disclosures describe using discrete digital objects and storing similar titles, images, and links, such that their combination would have been predictable and well within the skill of a POSITA. *See, e.g.* McQueen, 5:66-6:3 (describing storing links), Forsyth, 8:60-64 (describing storing links); Rieger, 5:19-23 (describing storing graphics, audios, links). Further, a POSITA would have had a reasonable expectation of success in combining because Rieger's pop-up window teachings were well-understood, standard practices for software developers at the time. Rieger, 19:25-27, 19:31-36. In all, the system and method would have been a predictable combination of known components according to known methods (*e.g.*, data collection, communication, and GUI methods), and would have produced predictable display and communication results. *KSR*, 550 U.S. at 416.

McQueen and Knapp: As an example, and without limitation, it would have been obvious to a PHOSITA to combine the teachings of McQueen and Knapp. McQueen and Knapp are in the same field of endeavor. A PHOSITA would have been motivated to modify McQueen allow a user to copy a selected blog post of another author to the user's plog in view of Knapp. It would

have been within the ability of a PHOSITA to combine them. A PHOSITA would have had a reasonable expectation of success combining McQueen and Knapp because it only involves the predictable use of prior art elements according to their established functions.

It would have been obvious to a POSITA to modify McQueen to allow a user to copy a selected blog post of another author to the user's plog in view of Knapp. Knapp identifies a critical problem in distributed networking like McQueen's where the vast availability of data potentially leads to a "syndrome that can best be characterized as 'sipping information from a fire hose.'" Knapp, 1:20-43. This overwhelming volume of data causes users to "either fail to find the information they seek or they lose track of the information," and as a result, "they cannot find it again at a later point in time." *Id.* By applying Knapp's solution to McQueen, a POSITA would recognize the functional benefit of allowing a user to add (by copying) external posts into a centralized, stable website to ensure easier and robust access and organization, as well as to mitigate issues associated with losing information. *Id.*; Knapp, FIGs. 9, 12, and 17.

The integration of Knapp's add feature into McQueen's blurb pages would have helped transition the user from a passive reader to an active curator, significantly enhancing utility and user engagement with plogs. Knapp, FIGs. 9, 12, and 17. Knapp's select-then-display configuration also would have allowed system operators to earn money on posts while increasing interest in the content by first having the user select the content. Knapp, 23:35-24:3, 25:30-56, 28:31-44, FIGs. 6-9, 11-12, 16-17. Further, such features would have streamlined the reuse of valuable content and reduced duplication of effort across user pages. Knapp, FIGs. 9, 12, and 17. Thus, modifying McQueen's user blurb pages and system would have predictably "improv[ed] ... the way in which users access desired information" in several ways. Knapp, 2:15-20.

A POSITA would have had a reasonable expectation of success modifying McQueen in view of Knapp. Knapp, like McQueen, discloses various GUI configurations for browsing and interacting with content posted over the internet; both contemplate distributing content for potential e-commerce applications. McQueen, 1:5-11 (“provide personalized content to users of [catalog systems]”), 1:54-64, 9:29-50, FIG. 4; Knapp, 1:10-18, 23:64-24:3, FIGs. 6-9, 11-12, and 16-17; §V.F.

Knapp and McQueen both contemplate compatible configurations where partial content is displayed, for instance because of licensing requirements, in a scrollable window, and then more information about the content is displayed once the content is selected. McQueen, FIG. 4, 5:61-6:3; Knapp, FIGs. 6-9, 11-12, and 16-17. Both also disclose compatible content configurations that can link to other options and detailed pages. McQueen, 7:48-54; Knapp, FIGs. 6, 11, 16. In all, the combination would have been a predictable combination of known components according to known methods (*e.g.*, communication and GUI methods), and would have produced predictable display and communication results. *KSR*, 550 U.S. at 416.

Implementing as computer implemented method: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate implementing as a computer implemented method, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate implementing as a computer implemented method. For example, a POSITA would have recognized that implementing the system as a computer-implemented method would automate the processing, storage, and retrieval of data, thereby vastly increasing efficiency, scalability, and speed compared to manual methods.

As another example, a POSITA would have appreciated that implementing information-management and communication techniques on a computer would have allowed such techniques to be performed more quickly, at scale, and with improved storage, retrieval, automation, and sharing capabilities. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Configuring data into objects including a picture, a heading, and a link: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate configuring data into objects including a picture, a heading, and a link, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate configuring data into objects including a picture, a heading, and a link. For example, a POSITA would have appreciated that configuring data into objects with these specific elements provides a concise, visually informative summary of external content that allows users to quickly assess relevance before navigating to the underlying source via the link. As another example, a POSITA would have appreciated that packaging information in a compact object containing an image, title, and hyperlink would have improved readability, scannability, and navigation by allowing users to quickly understand the nature of the content and access the underlying source with a single selection. A POSITA also would have recognized that such a configuration would have standardized presentation of heterogeneous information sources while preserving direct access to the source material. It would have been within the ability of a PHOSITA to make such

a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Responsiveness to a user selection: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate responsiveness to a user selection, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate responsiveness to a user selection. For example, a POSITA would have recognized that making the system responsive to user selection provides an interactive and dynamic user interface, giving users control over information flow and the ability to access specific content on demand. As another example, a POSITA would have appreciated that allowing displayed objects to respond to user selection would have made the interface interactive and usable, enabling the user to open content, invoke functions, navigate to linked material, or otherwise manipulate information efficiently. A POSITA also would have understood that event-driven responses to user input were fundamental and ubiquitous in graphical user interfaces and therefore would have been a natural and predictable design choice. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Storing data corresponding to each object in a database: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the

references discussed in Appendices A-C to incorporate storing data corresponding to each object in a database, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate storing data corresponding to each object in a database. For example, a POSITA would have appreciated that storing object data in a database enables persistent, organized, and scalable data management, facilitating efficient retrieval, sorting, and multi-user access across a networked system. A POSITA would have appreciated that storing object-related data in a database would have improved persistence, organization, searching, updating, synchronization, and multi-user access. A POSITA also would have recognized that database-backed storage was a standard and efficient way to manage structured metadata and content references for many information objects. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Displaying in a uniform format: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate displaying in a uniform format, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate displaying in a uniform format. For example, a POSITA would have recognized that displaying objects in a uniform format creates a consistent, predictable, and intuitive user experience, significantly reducing the cognitive load required to parse

heterogeneous types of information. A POSITA would have appreciated that a uniform display format would have improved usability by allowing users to compare different content items quickly without needing to learn or interpret inconsistent layouts. A POSITA also would have recognized that a standardized presentation would have reduced cognitive load and made mixed content types easier to browse, sort, and manage. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Graphical functions: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate graphical functions, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate graphical functions. For example, a POSITA would have understood that providing graphical functions offers an intuitive, user-friendly means for interacting with the system, replacing complex text commands with easily identifiable visual triggers. A POSITA would have appreciated that graphically accessible functions such as buttons, menus, icons, or controls would have made the system easier and faster to use by allowing users to invoke common actions directly from displayed objects. A POSITA also would have understood that such graphical controls were conventional user-interface mechanisms that improved discoverability and efficiency. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art

elements according to their established functions.

Including advertisements in online pages or other content: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate advertisements in online pages or other content, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate advertisements in online pages or other content. For example, a POSITA would have appreciated that including such advertisements (for example, in a blog, post, website, page, etc.) would have allowed the author to generate revenue for his or her business. *See, e.g.*, Colas, [0002]-[0003], [0008]. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Including location indicators in online pages and advertisements of online pages: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate location indicators in online pages and advertisements of online pages, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate location indicators in online pages and advertisements of online pages.

For example, a POSITA also would have appreciated that including a uniform location indication (for example, in a blog, post, website, page, etc.) would have increased the

effectiveness and engagement of the posts by allowing users to see if the post is relevant to them, close by, etc. *See, e.g.*, Colas, [0121]-[0122], FIGs. 4A, 10A-B, 11A, 12A, 13, 24A-B. As another example, incorporation of the such features also would have helped sales professionals better maintain and control their advertising and online outreach. *See, e.g.*, Colas, [0094]-[0095]. As another example, a user could easily manage when and how such a post is published and timed. *See, e.g.*, Colas, [0016], [0110]-[0111] (“ad run period”), [0132], [0244]. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

illustrating the location of online posts on a map: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate illustrating the location of online posts on a map, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate illustrating the location of online posts on a map. For example, a POSITA would have recognized that illustrating the location of online posts on a map would enhance user experience by allowing users to see the physical relevance for the information being shared and search for relevant posts based on location. *See, e.g.*, Rieger, 1:25-34, Fig. 4 (exemplary illustration of a map and posts for user), FIG. 11, 1:62-65, 2:39-43, 4:4-14, 13:1-31, 24:4-28.

As another example, a POSITA would have recognized that such functionality would help facilitate the community-based interactions by better enabling dialog options between users

for specific groups, etc. and enabling more geographically relevant information to be provided to particular populations. *See, e.g.*, Rieger, 2:9-27, 4:4-14, 16:36-48, Abstract. As another example, a POSITA also would have recognized that implementing such teachings also would have better linked blurb/post sharing based on location to better target certain posts and/or advertisements. *See, e.g.*, McQueen, 1:64-2:16 (describing targeted posts for users); Rieger, Abstract (describing location-based posts for users). It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Reporting and information-tracing features: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate reporting and information-tracing features, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate reporting and information-tracing features. For example, a POSITA would have recognized that implementing information-tracing features in the system and method would have significantly enhanced a user's understanding of social influence and weight of posts, a helpful addition to any system that, for example, allows users to publish content and "forward" or "send" blurbs. *See, e.g.*, Briggs, 5:30-32, 8:24-33, 9:25-27, 10:36-47, 19:5-36. As another example, incorporating such teachings similarly would have allowed users to know whether a given post could be trusted based on who forwarded the information. *See, e.g.*, Briggs, 9:25-27, 19:31-36. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable

expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Instant messaging, message indicators, and new message count: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate instant messaging, message indicators, and new message count, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate instant messaging, message indicators, and new message count. For example, a POSITA would have recognized that implementing an instant messaging or chat function would have enhanced user experience with the blurbs by allowing for real-time, dynamic interaction between mobile devices. *See, e.g.*, Forsyth, FIGs. 1, 6-7, 2:40-53, 5:8-26, 6:27-57.

As another example, a POSITA would have recognized that such a modification would have offered group, push, and threaded conversation benefits. As another example, displaying a number of new messages associated with a discussion would have helped the user understand if new messages existed for increased convenience and usability. *See, e.g.*, Forsyth, 6:28-36. Such new message indicators were helpful and ubiquitous before the alleged time of invention. As another example, a POSITA would have been motivated to implement instant messaging and object sharing. For instance, a POSITA would have appreciated that including GUI and selection logic for an internet object would have provided an easy and efficient method for graphically selecting specific information to share with recipients, thereby enhancing user experience. *See, e.g.*, Briggs, 7:37-55, 9:16-57, FIG. 6. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of

success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Displaying total number of instant messages: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate displaying the total number of instant messages, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate displaying the total number of instant messages. For example, a POSITA would have appreciated that displaying the total number of instant messages provides users with an immediate visual metric of the volume and intensity of a conversation, helping them quickly gauge the activity level or importance of a specific discussion thread. A POSITA would have appreciated that an immediate visual indication of the amount of discussion associated with an item would help users prioritize which items warranted attention, and would have recognized that a total message count would have improved convenience and usability by allowing users to assess activity without opening each discussion thread individually. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Commenting, comment indicators: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate commenting and comment indicators, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known

Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate commenting and comment indicators. For example, a POSITA would have recognized that incorporating commenting and comment indicators fosters collaborative community interaction, allows users to share contextual insights, and provides necessary visual cues alerting users to ongoing discussions without needing to open the object. Allowing users to add comments to an item would have enhanced collaboration, discussion, feedback, and refinement of shared content. A POSITA also would have recognized that a visible comment indicator would have alerted users that discussion existed for a given item, thereby improving navigation and encouraging engagement with relevant content. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Voting, vote indicators: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate voting and vote indicators, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate voting and vote indicators. For example, a POSITA would have appreciated that voting and vote indicators provide a democratic mechanism for community-driven filtering, allowing users to rapidly identify and rank the most relevant or high-quality content amidst large volumes of data. As another example, a POSITA would have appreciated that allowing users to vote on content would have provided a simple mechanism for expressing approval, relevance,

quality, or preference. A POSITA also would have recognized that displaying a vote indicator would have provided immediate social feedback regarding the popularity or perceived usefulness of an item, thereby helping users identify promising content more efficiently. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Displaying total number of votes: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate displaying the total number of votes, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate displaying the total number of votes. For example, displaying a vote indicator would have provided an immediate visual metric of quality or popularity, enabling users to quickly distinguish between “good” and “poor” content without opening or reading every individual blurb. *See, e.g.*, McQueen, 6:14-30. By the early 2000s, such total vote displays were standardized, boosted user engagement, and simplified content navigation.

As another example, a POSITA would have appreciated that showing a “total vote tally,” U.S. Patent Pub. No. 2002/0069105 (“do Rosario Botelho”), [0050], would have provided immediate social information, allowing users to instantly gauge post popularity. Such an indicator also would have helped users filter through noise; by highlighting “more popular proposals,” such systems “increase the likelihood” that the most relevant and helpful content is prioritized and considered. *See, e.g.*, U.S. Patent Pub. No. 2003/0189592 (“Boresjo”), [0055]. It

would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Converting a web page into an internet post: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate converting a web page into an internet post, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate converting a web page into an internet post. For example, a POSITA would recognize that it reduced the amount of effort and time needed to create blurbs/posts by automatically capturing the appropriate title, heading, description element, image, etc. from a web page. *See, e.g.,* Csaszar, [0014], [0243]-[0247], FIG. 7. As another example, such streamlining would have increased the usability and reach of the system. *See, e.g.,* Csaszar, [0014], [0243]-[0247], FIG. 7. As another example, it would have increased readability and user experience. *See, e.g.,* McQueen, FIG. 4, 8:24-33; Csaszar, [0044]. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Replicate/copy: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate replicate/copy functions, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA

would have been motivated to modify any of the references discussed in Appendices A-C to incorporate replicate/copy functions. For example, a POSITA would recognize the functional benefit of allowing a user to add (by copying) external posts into a centralized, stable website to ensure easier and robust access and organization, as well as to mitigate issues associated with losing information. *See, e.g.*, Knapp, 1:20-43, FIGs. 9, 12, and 17.

As another example, integration of such features would have helped transition the user from a passive reader to an active curator, significantly enhancing utility and user engagement. As another example, such features would have streamlined the reuse of valuable content and reduced duplication of effort across user pages. *See, e.g.*, Knapp, FIGs. 9, 12, and 17. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Link function: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate a link function, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate a link function. For example, a POSITA would have recognized that a link function is essential for providing a direct, seamless navigational pathway to the original, full-text source of the summarized data item, ensuring users can access complete information. A POSITA would have appreciated that a link function would have allowed users to navigate directly from a summarized object to the underlying source material, thereby improving efficiency and preserving access to

fuller context. A POSITA also would have recognized that hyperlinking was a standard and highly useful mechanism for connecting related information and reducing duplication of stored content. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Indicators reflecting activity: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate indicators reflecting activity, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate indicators reflecting activity. For example, a POSITA would have appreciated that indicators reflecting activity provide users with a rapid visual summary of engagement, highlighting trending or active content without requiring the user to manually review individual objects. As another example, a POSITA would have appreciated that activity indicators would have informed users whether a content item was active, recently updated, discussed, or otherwise engaged with, thereby allowing users to prioritize attention and identify dynamic information. A POSITA also would have recognized that such indicators improve usability and awareness in collaborative systems by presenting status information at a glance. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Replicability across collections: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate replicability across collections, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate replicability across collections. For example, a POSITA would have understood that allowing replicability across collections facilitates the seamless sharing, curation, and dissemination of useful information among different users, enhancing the collaborative utility of personalized workspaces. As another example, a POSITA would have appreciated that allowing an item to be replicated across multiple collections would have improved organization and reuse by permitting the same useful content to appear in multiple relevant contexts without requiring recreation. A POSITA also would have recognized that such functionality would have facilitated collaboration by enabling one user's selected content to be efficiently shared into other users' folders, views, or collections. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Graphical buttons: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate graphical buttons, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate graphical buttons. For example, a POSITA would have recognized that graphical buttons provide

clear, easily clickable targets for users to execute commands, streamlining the user interface and improving overall ease of use. As another example, a POSITA would have appreciated that graphical buttons would have made common operations easier to discover and execute by giving users direct visual access to the available functions. A POSITA also would have understood that buttons were among the most conventional interface mechanisms for invoking actions and therefore would have been a natural implementation choice. It would have been within the ability of a POSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Time stamps: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate time stamps, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate time stamps. For example, a POSITA would have appreciated that including time stamps is essential to maintain chronological order, track the recency of information, and manage version control in a dynamic, multi-user environment. As another example, a POSITA would have appreciated that time stamps would have informed users when content was created, modified, shared, or commented upon, thereby improving context, credibility assessment, sorting, and chronological tracking. A POSITA also would have recognized that time stamping was a conventional and useful feature in content-management and messaging systems. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only

involves the predictable use of prior art elements according to their established functions.

Displaying author name: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate displaying an author name, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate displaying an author name. For example, a POSITA would have recognized that displaying the author name establishes accountability, builds trust within the community, and allows users to evaluate the credibility and source of the shared information. Indeed, a POSITA would have appreciated that identifying the author of a post or object would have helped users evaluate the provenance, credibility, and relevance of the information. Author identification would have improved collaboration and accountability by showing who created or contributed the content. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Displaying date of creation: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate displaying the date of creation, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate displaying the date of creation. For example, a POSITA would have understood that displaying the date of creation helps users immediately assess the timeliness and

historical context of an information object, ensuring they can prioritize recent or relevant data. As another example, a POSITA would have appreciated that displaying a creation date would have allowed users to assess the freshness and temporal relevance of content and sort or filter items by recency. A POSITA also would have recognized that showing creation dates would have improved organization and historical context in systems involving many pieces of content. It would have been within the ability of a PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

Synchronizing data across collections: As an example, and without limitation, it would have been obvious to a POSITA to modify the teachings of any of the references discussed in Appendices A-C to incorporate synchronizing data across collections, as taught by any of the references that disclose this well-known feature. *See infra* Section IV.D.1-2 (Well-Known Elements in the Art). A POSITA would have been motivated to modify any of the references discussed in Appendices A-C to incorporate synchronizing data across collections. For example, a POSITA would have appreciated that synchronizing data across collections ensures that all users have access to the most up-to-date information, preventing data fragmentation and maintaining state consistency across the distributed platform. Synchronization across collections would have ensured that copies or instances of the same information remained current and consistent in multiple locations, thereby reducing version-control problems and duplicate maintenance effort. A POSITA also would have recognized that such synchronization would have been especially useful in collaborative environments in which the same content could appear in multiple users' views or collections. It would have been within the ability of a

PHOSITA to make such a modification/combination. A POSITA would have had a reasonable expectation of success in making such a modification/combination because it only involves the predictable use of prior art elements according to their established functions.

It would also have been obvious to a PHOSITA to incorporate standard knowledge in the field with respect to the above references, including using teachings from standard industry textbooks, handbooks, publications and the like, which may be identified in association with expert testimony.

Clear and logical rationale to combine any of the references identified above with others exists from the prior art references themselves, as well as from the interrelated teachings of other prior art references, common knowledge, common sense, predictability, expectations, industry trends, design incentives or need, market demand or pressure, market forces, obviousness to try, the existence and nature of a known need or problem, and/or knowledge possessed by a person of ordinary skill. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success. Therefore, various reasons to combine the disclosed references exist. Meta reserves the right to rely on the knowledge of those skilled in the art, the testimony of expert witnesses, and/or other prior art, to show that it would have been obvious to include the allegedly missing limitation and to explain the motivation to combine the prior art elements.

1. State of the Art

By the 1960s and 1970s, it was common for multiple users to be connected via a network to the same mainframe computer, with each user effectively having interactive, real-time access to its services. As timesharing and networked computing spread, interactive tools emerged to facilitate communication between system users, including for example, Unix systems in the early 1970s, and commands such as Unix ‘talk’ by the early 1980s, and email for asynchronous communication over ARPANET in 1971. *See, e.g.,* Schatz, Bruce R. Building an electronic community system (1991), 90-92. As another example, Augment/NLS integrated hypertext linking, shared workspaces, real-time collaborative editing, telepresence-like video and audio links, and sophisticated knowledge management tools. *See, e.g.,* Engelbart, Douglas C. and English, William K. A research center for augmenting human intellect (1968); see also <https://www.youtube.com/watch?v=yJDv-zdhzMY>.

In the late 1970s and early 1980s small, inexpensive computers such as the Apple II, IBM PC and Commodore 64 became widely available. By the late 1980s, collaboration into everyday computing emerged, including the emergence of Computer-Supported Cooperative Work (CSCW). By at least as early as the late 1980s, it was well known and conventional for computer systems to support sophisticated messaging systems that incorporated voting functions. *See, e.g.,* Borenstein, Nathaniel S. and Thyberg, Chris A. Cooperative work in the Andrew message system (1988), Fig. 6 (reproduced below). By at least as early as 1991, it was also well known and conventional for computer systems to support electronic communities, including features for uniformly formatted displayed objects, multiple displayed collections of objects, links between objects, links to locations in graphical images of physical maps, and various other graphical indicators. *See, e.g.,* Schatz, Bruce R. Building an electronic community system (1991), p. 102-04, Figures 3-4 (describing uniformly formatted information objects, multiple displayed

collections of information objects, links between objects, objects that link to and display selectable locations in graphical images of physical maps, indicators of the number of items in a collection, and an indicator of the availability of shared annotations on information objects).

The emergence of the World Wide Web in the mid-1990s caused rapid growth in the development and deployment of online services, including instant messaging such as AOL Instant Messenger in 1997, Yahoo! Messenger in 1998, and Microsoft Messenger in 1999. By at least the late 1990s, it was well known, routine, and conventional for teleconferencing applications to include uniformly formatted information objects displaying data, including graphical icons, related to collaboration participants. *See, e.g.*, US5,854,893, FIG. 2A, 19:1-23, 26:29-48. Systems also provided a collage of information-sharing interactive media elements. *See, e.g.*, Greenberg, Saul and Rounding, Michael. The notification collage: posting information to public and personal displays. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '01) (2001). By the mid 2000s, many social computing platforms were widely available on the web, including SixDegrees.com (launched in 1997), Makeoutclub.com (1999), Friendster (2002), MySpace (2003), Hi5 (2004) and Facebook (2004).

By the early 2000s and well before the purported priority date of the Asserted Patents, the relevant art, including blogs, RSS-based syndication, user-generated publishing, social-networking profiles, commenting, messaging, voting, tagging, and location-aware web services, had become mature and well-known. A POSITA in this field would have understood that these features were part of a broad and well-known trend toward interactive, socially driven, database-backed web applications sometimes described at the time as “Web 2.0.” These feature were built on the well-known principles of user-generated content, open interfaces, and web applications that improved through user interaction.

Long before the alleged invention dates, blogging and related online publishing were already widespread. The term “blog” was in use by 1999, and by the early 2000s blogging had become mainstream because services and tools made it easy for ordinary users to create and maintain posts without specialized technical knowledge. Contemporary accounts described the blogosphere as growing explosively: in 2005, the number of blogs was doubling roughly every five months, with approximately 19.6 million blogs by October 2005. See <https://www.britannica.com/topic/blog>.

The underlying technical infrastructure for syndicated post-like content was likewise established well before the Asserted Patents. RSS 0.91 was published in 2000, and RSS 2.0 was published on August 19, 2002. See <https://www.rssboard.org/rss-history>. The RSS specifications expressly contemplated channels containing individual “items” with titles, publication dates, comments URLs, categories, GUIDs, and source identifiers—i.e., structured content objects suitable for aggregation, display, reposting, and interaction. See <https://www.rssboard.org/rss-2-0>. By 2003, stewardship of RSS 2.0 had moved to Harvard’s Berkman Center, reflecting how broadly adopted the format had become. See <https://cyber.harvard.edu/rss/advisoryBoard.html>.

At the same time, social-networking services were becoming a dominant paradigm for organizing and sharing user content. Friendster launched in 2002 and quickly gained traction as a profile-based social network built around friends-of-friends. MySpace launched in 2003, LinkedIn also launched in 2003, and Flickr launched in 2004 with photo sharing and social features. These services normalized personal profiles, user posts, messaging, comments, favorites, groups, and other social metadata. Based on these (and other) numerous products, a POSITA would have viewed interactive social publishing and profile-centric content sharing as a clear and widely recognized direction of the art.

Voting, ranking, and community feedback mechanisms were also well known. Social-news and forum-style systems used visible popularity signals so users could quickly identify valuable or trending content. These systems reflected an established design principle of the period: user communities could help sort and surface content through explicit votes, comments, and other engagement metrics. That principle fits squarely within the broader early-2000s movement toward collective filtering and participatory content curation.

Likewise, interactive communication functions were routine. Instant messaging was already a mature and ubiquitous technology, and early social platforms incorporated messaging, discussion, and notification-style features to support real-time or near-real-time interaction around shared content. A POSITA would have understood message indicators, unread counts, comment notices, and related activity cues as standard usability features in collaborative systems, not inventive breakthroughs. This was part of the same broader trend toward dynamic, user-responsive interfaces.

The art also was moving toward richer media objects and more uniform presentation of content. Blog entries, feed items, and social posts were commonly organized as discrete units containing titles, excerpts, links, dates, authorship, and often images or thumbnails. RSS itself defined item-level metadata such as title, source, comments, category, GUID, and publication date, while commercial blogging and social services increasingly presented such items in repeatable templates or feed-like views. A POSITA would therefore have found it routine and predictable to structure content into standardized objects and display them in a uniform format.

Advertising-supported publishing was equally conventional. By the early 2000s, web publishers and bloggers commonly monetized content through online advertising, and contemporary commentary explicitly described advertising as a revenue source for blogs and

similar websites. Thus, integrating advertisements into online pages or associating advertising with user-facing content would have been understood as an ordinary commercial implementation choice. See, e.g., <https://www.theguardian.com/technology/blog/2005/oct/18/thestateofth>; <https://www.wired.com/2005/10/are-you-ready-for-web-2-0/>.

Location-aware and map-based presentation also emerged during this same time frame. Products like maps services (like Google Maps) and Flickr's geotagging features quickly helped normalize interactive map interfaces and showed strong adoption, illustrating that users and developers were already pairing online content with geographic metadata. A POSITA therefore would have been familiar with the idea of attaching location information to content, presenting content on a map, and using location to improve relevance and searchability.

Overall, the state of the art in the early 2000s was one of convergence. Blogging tools, RSS syndication, social-networking platforms, instant messaging, profile-based publishing, comments, voting, online advertising, tagging, and map-based location services were all mature and were being combined routinely and predictably. A POSITA would have been well aware of this convergence and would have understood that combining such known features in a single system involved the predictable use of prior-art elements according to their established functions, with a reasonable expectation of success.

Meta contends that the asserted claims are obvious, in part, because they merely arrange old elements, with each performing the same function that had been previously known, to perform and yield no more than what one having ordinary skill would expect from such an arrangement. Because there were a finite number of predictable solutions in the art at the time of the claimed inventions, it would have been obvious to a person having ordinary skill in the art to pursue the well-known options.

For any claim limitation that Cogmedia alleges is not disclosed in a particular prior art reference, Meta reserves the right to assert that any such limitation is either inherent in the disclosed reference or obvious to one of ordinary skill in the art at the time in light of the same, or that the limitation is disclosed in another of the references disclosed and in combination would have rendered the Asserted Claims obvious. To the extent that an issue arises with any such limitation, Meta reserves the right to identify other combinations or references that would have made obvious the additional allegedly missing limitation to the disclosed system or method of operation. Further, Meta's diligent search for prior art references, additional documentation, and/or corroborating evidence concerning prior art systems is ongoing. Accordingly, Meta reserves the right to continue to supplement their production as Meta obtains additional prior art references, documentation, and/or corroborating evidence concerning invalidity during the course of discovery.

2. Well-Known Elements in the Art

Meta contends that the Asserted Claims are obvious, in part, because they merely arrange old elements, with each performing the same function that had been previously known, to perform and yield no more than what one having ordinary skill would expect from such an arrangement. Because there were a finite number of predictable solutions in the art at the time of the claimed inventions, it would have been obvious to a person having ordinary skill in the art to pursue the well-known options, including any of the claim limitations discussed below.

A "computer implemented method" was a well-known feature at the time. For example, this was disclosed by the following:

- McQueen at 4:53-58, 6:61-7:2, 6:14-23
- Briggs at 3:6-3:28

- Csaszar at [0237]-[0238], [0234]-[0237]
- Zaner at 7:49-7:69
- Robinson at [0024]-[0025]
- Willis at [0187]-[0188]
- Spivack at [0108]-[0109]
- Porter at [0205]-[0208]
- Dawson at [0100]
- Kurita at [0107]
- Hanson at 4:42-52
- Davie at [0184]-[0185]
- Moran at 4:62-5:23
- Horn at [0037]-[0038]
- Prager at [0003]-[0004]
- Nakabayashi at 34:50-34:63
- Milenkovic at [0016]
- McConn at [0030]
- Marcjan at [0037]
- Uchiyama at [0014]-[0015]
- Cardinal at 3:52-4:17
- Schultz at 1:46-62
- Jammes at 7:64-8:23
- Canfield at 13:42-69
- Christiansson at 1:5-24

- Knapp at 19:61-20:1
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
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Configuring data into objects “including a picture, a heading, and a link” was a well-known feature at the time to allow users to view information. For example, this kind of data organization was disclosed by the following:

- McQueen at 4:53-58, 7:3-17, 4:13-27, 7:55-64
- Briggs at 2:48-3:11
- Csaszar at [0024]-[0025], [0234]-[0247], [0127]-[0128]
- Willis at [0083]-[0085]
- Spivack at [0091]
- Kurita at [0107]
- Pinto at [0061]-[0062]
- Davie at [0182]-[0183]
- Horn at [0107]
- Prager at [0025]
- Nakabayashi at 21:28-21:35

- McConn at [0033]-[0034]
- Marcjan at [0025]-[0026]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
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“Responsive[ness] to a user selection” was a well-known feature at the time for better user interaction. For example, this kind of feature was disclosed by the following:

- McQueen at 4:53-5:3
- Briggs at 11:3-9
- Csaszar at [0243]-[0246]
- Zaner at 7:49-7:69
- Willis at [0239]-[0240]
- Spivack at [0205]
- Dawson at [0100]
- Kurita at [0099]
- Hanson at 12:10-19
- Pinto at [0063]-[0064]
- Moran at 13: 53-58

- Horn at [0339]
- Milenkovic at 9
- McCoon at [0036]
- Schultz at 1:51-5
- Jammes at 39:15-23
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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“Storing data corresponding to each of the information objections in the database system”

was a well-known feature at the time for better user readability. For example, this kind of data organization was disclosed by the following:

- McQueen at 4:53-65, 7:3-17
- Briggs at 2:48-3:11
- Csaszar at [0024]-[0025], [0234]-[0247], [0127]-[0128]
- Zaner at 7:49-7:69
- Willis at [0239]-[0240]
- Spivack at [0205]
- Dawson at [0100]

- Davie, Figs. 18-19
- Kurita at [0099]
- Hanson at 12:10-19
- Moran at 13:53-58
- Horn at [0339]
- Spivack at [0064]
- EWall Project and/or one or more of the EWall Documents

Displaying data in a “uniform format” was a well-known feature at the time for better user readability. For example, this kind of data organization was disclosed by the following:

- McQueen at 10:36-47, 4:27-43, 7:18-25, Fig. 4
- Briggs at 9:17-42
- Cszasz at [0209]
- Kurita at [0107]-[0108]
- Hanson at 11:27-11:53
- Davie at [0180]-[0183]
- Horn at [0298]-[0300]
- McConn at [0039]-[0040]
- Warner at 40-43
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents

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- EWall Project and/or one or more of the EWall Documents

“Graphical functions” were a well-known feature at the time to allow users to collaborate with each other. For example, this feature was disclosed by the following:

- McQueen at 5:19-33, 8:4-33
- Briggs at 17:10-16, 2:55-66
- Csaszar at [0209]
- Kurita at [0107]-[0108]
- Hanson at 11:27-53
- Davie at [0180]-[0183]
- Horn at [0298]-[0300]
- Prager at [0070]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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An “instant messaging” function was a well-known feature at the time to allow users to collaborate with each other. For example, this feature was disclosed by the following:

- McQueen at 8:24-33, Fig. 4
- Forsyth at 2:40-53, 5:8-24, 6:27-57
- Csaszar at [0237]
- Zaner at 7:17-34
- Spivack at [0194]
- Porter at [0209]
- Dawson at [0105]-[0107]
- McConn at [0046]-[0047]
- Warner at 40-43
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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A “comment” was a well-known feature at the time to allow users to collaborate with each other. For example, this feature was disclosed by the following:

- Forsyth at 4:9-14, 5:3-14, 5:27-43
- Briggs at 17:7-20, 11:60-66

- Csaszar at [0237]
- Zaner at 7:42-7:65
- Spivack at [0272]
- Porter at [0277]-[0279]
- Dawson at [0087]
- Hanson at 11:57-12:7
- Horn at [0298]-[0300]
- McConn at [0039]-[0400]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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A “vote” function was a well-known feature at the time to allow users to collaborate with each other. For example, this feature was disclosed by the following:

- McQueen at 6:14-29, 8:17-23, 4:44-52
- Briggs at 17:10-16, 2:55-66
- Csaszar at [0238]
- Knapp at 53:63-54:9
- Zaner at 15:68-16:5

- Robinson at [0037]
- Willis at 15:68-16:5
- Spivack at [0263]-[0268]
- Porter at [0085]
- Dawson at [0100]
- Kurita at [0096]-[0097]
- Hanson at 17:62-17:68
- Davie at [0181]
- Moran at 18:43-18:51
- Spivack at [0062]
- Uchiyama at [0107]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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A “replicate” or “copy” function was a well-known feature at the time to allow users to share with each other. For example, this feature was disclosed by the following:

- McQueen at 8:24-33, 10:36-47
- Briggs at 12:3-6

- Csaszar at [0113]-[0116], [0090]-[0093]
- Robinson at [0035]
- Porter at [0068]
- Kurita at [0119]-[0121]
- Horn at [0135]
- Nakabayashi at 10:22-24
- McConn at [0041]
- Knapp at 23:37-24:13
- Ludwig at 19:1-23, 24:48-60
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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A “link function” was a well-known feature at the time to allow users to collaborate with each other. For example, this feature was disclosed by the following:

- McQueen at 5:62-6:3, 8:4-16
- Briggs at 9:35-42, 2:49-66
- Csaszar at [0217]-[0218]
- Robinson at [0034]

- Spivack at [0017]
- Porter at [0214]
- Dawson at [0105]-[0106]
- Kurita at [0107]
- Hanson at 15:64-16:3
- Horn at [0123]
- Parsons at [0098]
- Uchiyama at [0020]-[0021]
- Cardinal at 4:10-21
- Nakabayashi at 8:12-23
- Schultz at 16:61-17:7
- Jammes at 46:57-47:7
- Knapp at 23:58-24:9
- Christiansson at 9:1-10
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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“Indicators reflecting activity” were a well-known feature at the time for better user experience. For example, this feature was disclosed by the following:

- McQueen at Fig. 4
- Willis at [0319]-[0320]
- Spivack at [0272]
- Porter at [0274]
- Dawson at [0087]
- Kurita at [0107]
- Hanson at 15:64-16:3
- Prager at [0073]
- McConn at [0040]
- Knapp at 23:48-24:9
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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A “message indicator” was a well-known feature at the time for better user experience. For example, this feature was disclosed by the following:

- McQueen at Fig. 4

- Forsyth at 5:3-14, 6:28-36
- Porter at [0274]
- Kurita at [0714]-[0171]
- Hanson at 15:64-16:3
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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A “vote indicator” was a well-known feature at the time for better user experience. For example, this feature was disclosed by the following:

- McQueen at 1:54-64, 1:32-44, Fig. 4
- Briggs at 10:26-10:33
- Willis at [0264]-[0270]
- Porter at [0201]
- Dawson at [0100]
- Kurita at [0096]
- Hanson at 17:62-68
- Moran at 18:43-18:51
- Uchiyama at [0114]

- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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A “comments indicator” was a well-known feature at the time for better user experience. For example, this feature was disclosed by the following:

- McQueen at Fig. 4
- Briggs at 9:16-20, Fig. 9
- Csaszar at [0237]-[0238], [0234]-[0237], [0210]-[0211]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
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A “drop down menu” was a well-known feature at the time for better user experience. For example, this feature was disclosed by the following:

- McQueen at 8:24-33
- Bezos at [0043], [0051]
- Ponce at [0079], [0086]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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Displaying a total number of votes was a well-known feature at the time better user experience in selecting and handling information. For example, this feature was disclosed by the following:

- McQueen at Fig. 4
- Briggs at 9:16-20, Fig. 9
- Csaszar at [0237]-[0238], [0234]-[0237], [0210]-[0211]
- do Rosario Botelho at [0050]
- Boresjo at [0055]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents

- Twitter and/or one or more of the Twitter Documents
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Displaying a total number of instant messages was a well-known feature at the time to allow users a better experience in selecting and handling information. For example, this feature was disclosed by the following:

- McQueen at Fig. 4
- Briggs at 9:16-20, Fig. 9
- Csaszar at [0237]-[0238], [0234]-[0237], [0210]-[0211]
- Jellinek at 14:11-13
- Vander Veen at [0058]
- Morehead at [0033]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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Replicability “across collections” was a well-known feature at the time to allow users a better experience in selecting and handling information. For example, this feature was disclosed by the following:

- McQueen at 4:28-43, 2:25-38, 8:24-32
- Briggs at 4:32-49, 12:3-16
- Csaszar at [0113]-[0118], [0224]-[0231]
- Robinson at [0035]-[0036]
- Willis at [0281]
- Spivack at [0167]-[0168]
- Porter at [0068]-[0069], [0333]-[0334]
- Davie at [0205]
- Horn at [0124]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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Converting a web page into an internet post was a well-known feature at the time to enable better user experience. For example, this feature was disclosed by the following:

- McQueen at 8:24-33, Fig. 4

- Csaszar at [0014], [0243]-[0247]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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Tracing information and reporting were well-known features at the time to allow users to better understand the impact of content, among other reasons. For example, this feature was disclosed by the following:

- McQueen at Fig. 2-4
- Briggs, at 5:30-32, 9:25-27, 10:36-47, 19:5-36
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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Using online pages to post advertisements including location indicators was also a well-

known feature at the time for better user engagement. For example, this feature was disclosed by the following:

- McQueen at Figs. 1-4
- Colas at [0002]-[0003], [0008], Figs. 4A, 10A-B, 11A, 12A, 13, 24A-B
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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A “graphical button” was a well-known feature at the time to allow users a better experience in selecting and handling information. For example, this feature was disclosed by the following:

- McQueen at 7:55-64, Fig. 4
- Briggs at 12:3-16
- Csaszar at [0163], [0244]-[0247]
- Zaner at 7:17-34, 8:32-40
- Spivack at [0167]-[0168]
- Porter at [0277]-[0279], Fig. 58
- Dawson at [0087], [0100]
- Hanson at 17:62-68
- Kurita at [0171]-[0172]

- Dawson at [0100]
- Davis at [0181]
- Knapp at 27:18-35
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
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Displaying the author's name was a well-known feature at the time for better user experience.

For example, this feature was disclosed by the following:

- McQueen at Fig. 4, 87:25-33
- Briggs at 2:59-3:11
- Willis at [0312]
- Csaszar at [0244]-[0247]
- Knapp at Fig. 8
- Spivack at [0052]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents

- Any work done by David Gelernter and/or Eric Freeman and/or any other contributors to Lifestreams
- Any work done by Patrick Winston and/or any other contributors to EWall
- EWall Project and/or one or more of the EWall Documents

Showing “an indication of a date of creation” or a times stamp was a well-known feature at the time for better user experience. For example, this feature was disclosed by the following:

- McQueen at 8:4-16
- Briggs at 11:3-9
- Csaszar at [0244]-[0247]
- Hanson at 15:65-16:3
- Willis at [0312]
- Horn at [0135]
- Knapp at 25:50-26:2
- Kurita at [0171]-[0172]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
- Any work done by David Gelernter and/or Eric Freeman and/or any other contributors to Lifestreams
- Any work done by Patrick Winston and/or any other contributors to EWall
- EWall Project and/or one or more of the EWall Documents

“Graphical selections” were a well-known feature at the time to allow users a better experience in selecting and handling information. For example, this feature was disclosed by the following:

- McQueen at Fig. 4
- Hanson at 17:62-68
- Davie at [0180]-[0183]
- Porter at [0333]-[0334]
- Spivack at Fig. 21
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
- Any work done by David Gelernter and/or Eric Freeman and/or any other contributors to Lifestreams
- Any work done by Patrick Winston and/or any other contributors to EWall
- EWall Project and/or one or more of the EWall Documents

A “report relating to users who replicated” the data was a well-known feature at the time to allow users a better experience in selecting and handling information. For example, this feature was disclosed by the following:

- Briggs at 12:3-6, 18:38-57, 19:23-46
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents

- Twitter and/or one or more of the Twitter Documents
- Any work done by David Gelernter and/or Eric Freeman and/or any other contributors to Lifestreams
- Any work done by Patrick Winston and/or any other contributors to EWall
- EWall Project and/or one or more of the EWall Documents

Indicating the “presence of a geographic location” was a well-known feature at the time to allow users a better experience in contextualizing information. For example, this feature was disclosed by the following:

- McQueen at Fig. 4
- Briggs at 2:59-3:11
- Csaszar at [0243]-[0247]
- Colas at [0121]-[0122]
- Davie at [0007]
- Kurita, Fig. 40
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
- Any work done by David Gelernter and/or Eric Freeman and/or any other contributors to Lifestreams
- Any work done by Patrick Winston and/or any other contributors to EWall
- EWall Project and/or one or more of the EWall Documents

Illustrating the location of online posts on a map was a well-known feature at the time to

give users a better sense of information in relation to location. For example, this feature was disclosed by the following:

- McQueen at Fig. 4
- Rieger at 1:25-34, 1:62-65, 2:39-43, 4:4-14, 13:1-31, 24:4-28, Fig. 11
- Csaszar at [0243]-[0247]
- Colas at [0121]-[0122]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
- Any work done by David Gelernter and/or Eric Freeman and/or any other contributors to Lifestreams
- Any work done by Patrick Winston and/or any other contributors to EWall
- EWall Project and/or one or more of the EWall Documents

Copying a select post from one user to another was a well-known feature at the time for better user experience. For example, this feature was disclosed by the following:

- McQueen at 8:24-33, 10:36-47
- Nakabayashi at 10:22-24
- Knapp at 23:37-24:13, 1:20-43
- EWall Project and/or one or more of the EWall Documents

Synchronizing data across collections was a well-known feature at the time to ensure users had cohesive and up-to-date experiences. For example, this feature was disclosed by the following:

- McQueen at Fig. 4
- Briggs at 9:17-42
- Spivack at [0153]-[0155]
- Hanson at 15:64-16:3
- Knapp at 53:63-54:9
- Warner at 51
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents
- Twitter and/or one or more of the Twitter Documents
- Any work done by David Gelernter and/or Eric Freeman and/or any other contributors to Lifestreams
- Any work done by Patrick Winston and/or any other contributors to EWall
- EWall Project and/or one or more of the EWall Documents

“Recommend[ing]... information object[s]” was a well-known feature at the time to enhance user engagement. For example, this feature was disclosed by the following:

- McQueen at 1:65-2:3
- Briggs at 19:23-46
- Forsyth at 5:27-30, 7:19-43, 9:36-45, 10:14-19
- Robinson at [0034], [0048]
- Konfabulator 1.0.2 and/or one or more of the Konfabulator Documents
- Sametime and/or one or more of the IBM Lotus Notes Documents
- Twine and/or one or more of the Twine/Spivack Documents

- Twitter and/or one or more of the Twitter Documents
- Any work done by David Gelernter and/or Eric Freeman and/or any other contributors to Lifestreams
- Any work done by Patrick Winston and/or any other contributors to EWall
- EWall Project and/or one or more of the EWall Documents

V. INVALIDITY UNDER 35 U.S.C. § 112

Meta hereby identifies grounds upon which the asserted claims are invalid for failure to meet the requirements of 35 U.S.C. § 112. These contentions shall not be construed as an admission that any claim construction advanced by Meta in this case is in any way inconsistent, flawed, or erroneous. Nor should these contentions prevent Meta from advancing claim construction and/or non-infringement positions in lieu of, or in addition to, invalidity positions. Further, these contentions shall not be construed as an admission of or acquiescence to Cogmedia's purported construction of the claim language or of other positions advanced by plaintiff during the course of this litigation. Meta's Preliminary Non-Infringement and Invalidity Contentions under 35 U.S.C. § 112 may depend, in part, on the Court's claim construction, as well as Cogmedia's alleged scope of the asserted claims. Consequently, Meta identifies only the issues under 35 U.S.C. § 112 of which it is presently aware.

A. 35 U.S.C. § 112, Second Paragraph: Lack Of Enablement

To comply with the enablement requirement of 35 U.S.C. § 112(a), the patent specification must teach those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation. *In re Wright*, 999 F.2d 1557, 1561 (Fed. Cir. 1993). Courts consider multiple factors to determine whether experimentation is undue, including: "(1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3)

the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims.” *In re Wands*, 858 F.2d 731. 737 (Fed. Cir. 1988).

As an example and without limitation, to the extent Cogmedia argues that any asserted claim of the Asserted Patents is not invalid in view of EWall Project and/or one or more of the EWall Documents (*see supra* , (EWall Prior Art Publications, Systems, and/or Knowledge, incorporated herein)) because the EWall Project and/or EWall Documents do not enable a POSITA to implement the claimed subject matter, then the claims of the Asserted Patents likewise are invalid for lack of enablement.

B. 35 U.S.C. § 112, First Paragraph: Lack Of Written Description

To comply with the written description requirement of 35 U.S.C. § 112, the patent specification must describe an invention in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention. *Regents of the Univ. of Cal. v. Eli Lilly & Co.*, 119 F.3d 1559, 1566 (Fed. Cir. 1997). Further, to satisfy the written description requirement, the disclosure of the patent must “convey with reasonable clarity to those skilled in the art that, as of the filing date sought, [the inventor] was in possession of the invention.” *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). “An applicant demonstrates that he was in possession of the invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the invention.” *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). “[T]he written description inquiry looks to the four corners of the specification to discern the extent to which the inventor(s) had possession of the invention as broadly claimed. The knowledge of ordinary artisans may be used to inform what is actually in the specification,

but not to teach limitations that are not in the specification, even if those limitations would be rendered obvious by the disclosure in the specification.” *Rivera v. Int’l Trade Comm’n*, 857 F.3d 1315, 1322-23 (Fed. Cir. 2017) (citations omitted). In other words, even if something reflects an obvious variation of the invention disclosed in the specification, the claims are invalid for lack of written description.

The asserted claims are invalid for failure to enable and/or provide a written description of the alleged invention as required by 35 U.S.C. § 112. A person skilled in the art would not be able to make and use the claimed inventions by reading the specification.

For example, the Asserted Patents fail to sufficiently describe or enable at least the following limitations:

1. The '562 Patent

The asserted claims of the '562 patent are invalid for failure to enable and/or lack of written description support based on the following terms:

- “execution of software instructions” (claim 1)
- “a set of indicators” (claim 1)
- “a message indicator that displays a number of instant messages associated with the information object” (claim 1)
- “a vote indicator that displays a number of votes associated with the information object” (claim 1)
- “providing a user interface having a graphical button” / “providing a user interface having a graphical button, which, when invoked while content is being displayed, causes the displayed content to be handled as one of the data items, namely, by configuring the displayed content as a new information object and making a representation of the new information object available for display in the uniform format” (claim 2)
- “a user-accessible report” / “the format includes a user-accessible report relating to users who replicated the information object” (claim 5)
- “responsive to (i) a graphical selection” / “a graphical selection” (claims 12, 13, 15)
- “graphically entered” (claims 12, 13)

- “responsive to (i) a graphical selection, by the first user, of an information object in the second view and (ii) a copy command that has been graphically entered by the first user, causing the selected information object to be copied from the second view to the first view, so that the selected information object in the collection of the second user has been copied to the first collection of the first user” (claim 12)
- “copy command” (claims 10, 12)
- “responsive to (i) a graphical selection, by the first user, of an information object in the first view and (ii) a send command that has been graphically entered by the first user, causing the selected information object to be sent to the second user, so that the selected information object in the collection of the first user is made available to the second user to be included in the collection of the second user” / “send command” (claim 13)
- “causing shared information objects to be synchronized with one another” (claim 16)
- “serving, to a client computing device of a first user, a first view of a first set of information objects that constitute a first collection of the first user; also serving, to the client computing device of the first user, a second view of a second set of information objects, outside of the first collection, wherein any given member of the second set of information objects is both included in a collection of another user and the other user has been selected by the first user; and wherein each of the information objects in the second view can, on a user-entered command, be caused to be copied to the first view” (claim 17)

- “each of the information objects in the second view is displayed in an order determined by a criterion selected from the group consisting of the information object’s creation time, its access time, and combinations thereof” (claim 18)
- “user-entered command” (claims 14, 15, 17)
- “client computing device” (claim 17)

2. **The ’371 Patent**

The asserted claims of the ’371 patent are invalid for failure to enable and/or lack of written description support based on the following terms:

- “execution of software instructions” (claims 1, 15)
- “a set of indicators” (claims 1, 15)
- “responsive to a user selection of the at least one data item: causing configuring of each of the data items into a distinct information object by extracting... displaying a representation of each of at least two of the information objects in the database system” (claims 1, 15)
- “an indicator reflecting commenting activity associated with the card” (claims 1, 15)
- “displaying a graphical button” (claims 2, 17)
- “displaying a graphical button, which, when invoked while content is being displayed, causes the displayed content to be handled as one of the data items, namely, by configuring the displayed content as a new information object and making a representation of the new information object available for display in the uniform format” (claims 2, 17)

- “a user-accessible report” / “the format includes a user-accessible report relating to users who copied the information object” (claims 4, 19)
- “displaying in a computing device of a first user, a first view of a first set of cards that constitute a first collection of the first user; and also displaying in the computing device of the first user, a second view of a second set of cards that constitute a collection of a second user” (claims 5, 20)
- “graphical selection” / “responsive to (i) a graphical selection, by the first user” / “graphical selection by a first user” (claims 6, 7, 9, 21, 22, 24)
- “graphically entered” (claims 6, 7, 21, 22)
- “responsive to (i) a graphical selection, by the first user, of a card in the second view and (ii) a copy command that has been graphically entered by the first user, causing the selected card to be copied from the second view to the first view, so that the selected card in the collection of the second user appears in the first collection of the first user” (claims 6, 21)
- “copy command” (claims 6, 21)
- “responsive to (i) a graphical selection, by the first user, of a card in the first view and (ii) a send command that has been graphically entered by the first user, causing the selected card to be sent to the second user, so that the selected card in the collection of the first user is made available to the second user to be included in the collection of the second user” (claims 7, 22)
- “graphically selected” (claims 8, 23)

- “on a user-entered command, causing a card to be shared with another user via an instant message sent through an integrated instant messaging system as a result of graphical selection by a first user” (claims 9, 24)
- “user-entered command” (claims 8, 9, 10, 23, 24, 25)
- “displaying in a computing device of a first user, a first view of a first set of cards that constitute a first collection of the first user; also displaying in the computing device of the first user, a second view of a second set of cards, outside of the first collection, wherein any given member of the second set of cards is both included in a collection of another user and the other user has been selected by the first user; and wherein each of the cards in the second view can, on a user-entered command, be caused to be copied to the first view” (claims 10, 25)
- “wherein each of the cards in the second view is displayed in an order determined by a criterion selected from the group consisting of the information object’s creation time, its access time, and combinations thereof” (claims 11, 26)
- “the indicator reflecting commenting activity associated with the card provides a numeric count of the commenting activity” (claims 14, 29)

3. The ’141 Patent

The asserted claims of the ’141 patent are invalid for failure to enable and/or lack of written description support based on the following terms:

- “execution of software instructions” (claims 1, 17)
- “a set of indicators” (claims 1, 17)

- “responsive to a user selection of the at least one data item: causing configuring of each of the data items into a distinct information object by extracting... displaying a representation of each of at least two of the information objects in the database system” (claims 1, 17)
- “an indicator reflecting commenting activity associated with the card” (claims 1, 17)
- “displaying a graphical button” (claims 2, 19)
- “displaying a graphical button, which, when invoked while content is being displayed, causes the displayed content to be handled as one of the data items, namely, by configuring the displayed content as a new information object and making a representation of the new information object available for display in the uniform format” (claims 2, 19)
- “responsive to (i) a graphical selection, by the first user, of a card in the second view and (ii) a copy command that has been graphically entered by the first user, causing the selected card to be copied from the second view to the first view, so that the selected card in the collection of the second user appears in the first collection of the first user” (claim 6)
- “responsive to (i) a graphical selection, by the first user, of a card in the first view and (ii) a send command that has been graphically entered by the first user, causing the selected card to be sent to the second user, so that the selected card in the collection of the first user is made available to the second user to be included in the collection of the second user” (claim 7)
- “graphically entered” (claims 6, 7)

- “responsive to (i) a graphical selection” (claims 6, 7)
- “on a user-entered command, causing a card to be shared with another user when the card and the other user have been graphically selected” (claim 8)
- “user-accessible report” / “the format includes a user-accessible report relating to users who copied the information object” (claims 4, 21)
- “user-entered command” (claims 8, 9, 10)
- “displaying in a computing device of a first user, a first view of a first set of cards that constitute a first collection of the first user; also displaying in the computing device of the first user, a second view of a second set of cards, outside of the first collection, wherein any given member of the second set of cards is both included in a collection of another user and the other user has been selected by the first user; and wherein each of the cards in the second view can, on a user-entered command, be caused to be copied to the first view” (claim 10)
- “each of the cards in the second view is displayed in an order determined by a criterion selected from the group consisting of the information object's creation time, its access time, and combinations thereof” (claim 11)
- “the indicator reflecting commenting activity associated with the card provides a numeric count of the commenting activity” (claim 15)

VI. INVALIDITY UNDER 35 U.S.C. § 101

A patent may be granted for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. There is “an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014). In *Alice*, the

Supreme Court set out a two-step “framework to determine whether a claim falls outside the scope of [§] 101.” *Affinity Labs of Tex. v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016). A court determines first “whether the claim is directed to a patent-ineligible concept, i.e., a law of nature, a natural phenomenon, or an abstract idea,” and second, “if so, ... whether the elements of the claim, considered both individually and as an ordered combination, add enough to transform the nature of the claim into a patent-eligible application.” *Id.* (internal quotation marks and citation omitted). “Patent eligibility under § 101 is an issue of law,” that “may sometimes contain underlying issues of fact.” *Ericsson Inc. v. TCL Commc’n Tech. Holdings Ltd.*, 955 F.3d 1317, 1321 (Fed. Cir. 2020); see *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018); *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1372 (Fed. Cir. 2020).

At *Alice* step one, courts “look at the focus of the claimed advance over the prior art to determine if the claim’s character as a whole is directed to excluded subject matter.” *Affinity Labs*, 838 F.3d at 1257; see *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 766 (Fed. Cir. 2019). Claims that “focus on a specific means or method that improves the relevant technology,” are patent eligible. *CardioNet*, 955 F.3d at 1368. However, “[i]f the claims are directed to [a] patent-ineligible concept[], then the inquiry proceeds to step two of the *Alice* framework.” *USC IP P’ship, L.P. v. Facebook, Inc.*, No. 6:20-CV-00555-ADA, 2021 WL 6690275, at *2 (W.D. Tex. Dec. 20, 2021).

At *Alice* step two, the court determines “whether the claimed elements—‘individually and as an ordered combination’—recite an inventive concept.” *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1316 (Fed. Cir. 2019) (quoting *Alice*, 573 U.S. at 217). The inventive concept must be “sufficient to ensure that the claim amounts to significantly more than the abstract idea itself.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343,

1347 (Fed. Cir. 2014). “Stating an abstract idea while adding the words ‘apply it with a computer,’” or “limiting the use of an abstract idea to a particular technological environment” does not make a claim any less abstract. *Alice*, 573 U.S. at 223–24; *Affinity Labs. of Tex.*, 383 F.3d at 1259.

Here, each asserted claim of each asserted patent is directed to a patent-ineligible abstract idea without transformative inventive concept. For example, each Asserted Claim of the ’141, ’371, and ’562 Patents recite processes of collecting, standardizing, and organizing data items into “Information Objects” and identifying “relations” between them based on spatial proximity, collaborative context, or user interaction history. These are merely mental processes that humans have performed for generations—such as manually arranging “index cards, credit cards, business cards, slides, photographs and postcards” on a physical surface to identify connections during “sense-making activities” using ordinary reasoning, memory, and basic organizational context. The recitation of generic components such as a “computer system” , “database system” , “processor” , “memory unit” , “input output interface” , “communications interface” , “graphical user interface” , and functional software modules like a “relation manager” , “view manager” , “workspace server” , or a “discovery view” merely automates these mental processes and manual activities (e.g., “brainstorming,” “problem-solving,” “information collecting,” and “decision-making”) without adding a sufficient inventive concept. For the avoidance of doubt, nothing in these contentions should be understood as a concession that expert evidence or testimony is necessary to resolve the subject matter eligibility of the asserted claims of the Asserted Patents. Nonetheless, Meta reserves the right to further rely on expert testimony and/or deposition and documentary evidence to be disclosed in accordance with the case scheduling order. Meta reserves the right to amend and supplement these ineligibility contentions accordingly.

A. The ’562 Patent

Asserted claims 1-3, 5, 7-8, 11-15, 17-18, including claim 1, recite unpatentable subject matter under § 101.

During prosecution, the Applicant previously characterized the claimed subject matter as establishing an “entire environment” in which arbitrary third-party data can be shared and interacted with via specific functions and indicators built into a uniform format. *See* 05-01-2017 Applicant 101 Brief in Supplemental Response for ’562 Patent, p. 11. At *Alice* step one, the Applicant argued the claims provide a “technological improvement in the operation of computers in a network environment” by focusing on a specific method to improve technology rather than a mere result by drawing analogizing to cases like *Enfish* and *McRO*. *Id.*, 13. Applicant asserted the claims achieve a technical solution specific to computer networks by purposefully arranging components in a distributed architecture. *Id.* Furthermore, the Applicant argued the claims avoid preemption because others remain free to use general “card formats” so long as they omit the specific set of indicators and functions mandated by the claims. *Id.*, 14. Yet despite these characterizations, the Applicant’s own briefing admits that a core concept is “putting data items into a card format,” undermining any technological improvement system arguments, thus showing that the system is modeled after sense-making activities and designed to accommodate existing human cognitive traits in treating information as “objects.” ’562 Patent at 8-15.

At *Alice* step one, the claims of the ’562 Patent are directed to the abstract idea of organizing information and recommending related content based on user interactions. The ’562 Patent claims to advance “converting, standardizing, abstracting, and associating information” to better a “focus on relating information uninfluenced by the format and location.” ’562 Patent, 11:1-5.

Indeed, the '562 Patent admits that its “way of thinking” is a human trait and that the system “accommodates this way of thinking” by treating data as “virtual objects.” *Id.*, 11:5-37. Similar to a physical bulletin board, an “electronic wall” as noted by the patent seeks to organize information “in a manner that makes sense to the user.” *Id.*, 11:6-9. This mirrors the abstract idea of “collecting, displaying, and manipulating symbols of information” which courts have consistently held to be unpatentable. *See IBM Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1381 (Fed. Cir. 2022); *Recentive Analytics*, 134 F.4th at 1213. The claims at most instruct the user to “provide,” “share,” “attach,” and “display,” which are generic functions that describe the result of human interaction rather than articulate a specific technical solution. *See generally* '562 Patent.

At *Alice* step two, the '562 Patent offers no inventive concept beyond the abstract idea itself. The claims recite a “communications path” and the “transfer” of objects between “views,” all of which are achieved using a conventional “network” and “interface” technology. *Id.* In fact, the “Information Views” are mere computer windows, which are ubiquitous within computing. Furthermore, the Patent admits that its “automated creation” of objects is essentially a “plugin” that searches for a “hyperlink destination” for a “graphic”, which is a process that relies on existing web and file system structures. *Id.*, 12:37-51. These steps, an ordered combination, create, share, and provide a chat room for objects, which is social or collaborative software at its core, thus lacking unconventional technological advance.

B. The '141 Patent

Asserted claims 1-13, 15, 17-22, including claim 1, are unpatentable subject matter under § 101.

At *Alice* step one, the claims of the '141 patent are directed to an abstract idea: the collection,

organization, and standardized display of information. The purported advance of the '141 Patent is to provide a “standardized information format” that allows users to “focus on and compare the information content and context rather than be distracted by the information format and location.” See '141 Patent at 3:6-13.

But the '141 Patent admits that it aims to mimic basic human organizational behavior, thus solving a human cognitive problem, not a technical one. Indeed, the specification states that “[h]umans like to think of data, information and knowledge as objects that they collect, compare and organize.” *Id.*, 11:8-10. The patent further states that the “benefits of standardized information objects are present in various every day objects” and then points to “index cards, credit cards, business cards, slides, photographs and postcards” as examples. *Id.*, 11:5-27. In fact, the specification even compares its graphical indicators to “military ribbons” and “traffic signs”. *Id.*, 11:33-40. In doing so, the '562 Patent points to tell-tale signs of abstraction. See, e.g., *Zapfraud, Inc. v. Fireeye, Inc.*, No. 19-1688-CFC, 2020 WL 6822972 (D. Del. Nov. 20, 2020); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016).

The claims do not require any specific algorithm to achieve the results. The patent relies on functional “black-box components” like the “Relation Manager” or “Relation Processing Algorithms” that the specification defines by the outcome they are meant to achieve, another sign of abstraction. '141 Patent at 8:20-50; see, e.g., *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1345 (Fed. Cir. 2018); *IBM Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1381 (Fed. Cir. 2022); *Recentive Analytics*, 134 F.4th at 1213.

At *Alice* step two, the '141 Patent recites generic computer components to collect and store data, which cannot provide an inventive concept. See, e.g., *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). The claims do no

more than recite functional elements—“configuring” data items, “extracting” data, and “storing” such data in a “database system.” *See generally* ’141 Patent claims. Moreover, the specification describes using generic “computer systems,” a standard “memory”, and a “graphical user interface.” *Id.*, 7:52-65. And still the ordered combination is not inventive, since at best it is a mere automation of the age-old practice of using index cards to organize research, which can be translated to a predictable use of a computer. Carrying out an abstract idea through standard computer functions does not form and inventive concept.

Cogmedia will not be able to show that there is anything unconventional about how the limitations in its claims are arranged such that there is any inventive solution to a prior art problem. *See, e.g., Bascom Glob. Internet Servs. Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016). Even then, at best any ordering would merely carry out the abstract idea itself, which cannot form the inventive concept. *See, e.g., TLI*, 823 F.3d at 615; *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1370 (Fed. Cir. 2018).

C. The ’371 Patent

Asserted claims 1-29, including claim 1, recite unpatentable subject matter under § 101.

At *Alice* step one, the claims of the ’371 Patent are directed to the abstract idea of organizing information and recommending related content based on user interactions. The specification claims the system “greatly enhances the quality and the speed of individual and collaborative brainstorming”. ’371 Patent at 5:24-28.

In fact, the ’371 Patent states that its “Discovery View” merely mimics the way a human or a manual service would find “related products” or “related information”. *Id.*, 18:1-18. The patent acknowledges that its core “Information Object” concept is just a digital version of “everyday objects” like “index cards” and “photographs”. *Id.; id.*, at 11:15-23. The goal is to

“increase a human's ability to deal with complex sense-making tasks,” which is a pedagogical or organizational goal, not a technical improvement to computer functionality. *Id.*, 11:10-15; *see, e.g., Zapfraud, Inc. v. Fireeye, Inc.*, 2020 WL 6822972 (D. Del. Nov. 20, 2020) (finding claims directed to human-like behavior abstract). The claims use functional language to describe “processing information object data... to make a recommendation” without specifying a transformative technological process. This is an abstract “black box” that mimics a human researcher's patience or tiredness in a search process.

At *Alice* step two, the '371 Patent relies on a “processor,” “memory unit,” and “interconnect” to execute the claimed steps. '371 Patent at 5:24-46. These are generic and conventional computer components. The steps of “storing,” “extracting,” and “displaying” in a “uniform format” are the most basic functions of any database-driven GUI. *See* Asserted Claims. The “recommendation” criteria such as “popularity” (number of views/copies) or “spatial proximity” are conventional data-sorting parameters that do not require unconventional computer architecture. *Id.* As such, there is nothing unconventional about the arrangement of these limitations; instead, they represent a predictable automation of information management.

VII. DOUBLE PATENTING

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but are not patentably distinct from the reference claim(s) because the claims are either anticipated by, or would have been obvious over, the reference claim(s). *See, e.g., In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Langi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum* 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

The claims of the '562 Patent are not patentably distinct from, because they are anticipated or obvious over, one or more claims of the '141 Patent. The claims of the '141 Patent are not patentably distinct from, because they are anticipated or obvious over, one or more claims of the '562 Patent. As an example, the independent claims of both the '562 and '141 Patents purport to claim a computer-implemented method for managing data through an information object system. The independent claims of both patents claim a process that organizes data items into distinct information objects, each associated with a picture, a heading, and a link to the original source. These objects are then displayed in a uniform "card" format that includes these extracted elements along with a set of indicators and a mechanism for graphical access to various functions (e.g. a vote function, a copy function, and a link function). The method of both patents provides for a collaborative architecture where a database system allows users to maintain their own card collections while ensuring the content remains accessible and copyable across the collections of different users. Specifically, the independent claims of the '562 Patent requires the source to be external to the database system, while the '141 Patent broadens the scope of the claims by doing away with this requirement.

The claims of the '141 Patent are not patentably distinct from, because they are anticipated or obvious over, one or more claims of the '371 Patent. The claims of the '371 Patent are not patentably distinct from, because they are anticipated or obvious over, one or more claims of the '141 Patent. As an example, the claims of both the '141 and '371 Patents purport to claim

a method for configuring data items into distinct information objects—each featuring a picture, a heading, and a link—that are displayed in a uniform card format containing a set of indicators and providing access to graphical functions. These patents further share a collaborative database architecture that allows each user to maintain a “user-selected collection of cards” while ensuring those objects remain “accessible and copyable across card collections of different users.”

Moreover, the claims of the '562 Patent, the '141 Patent, and the '371 Patent are not patentably distinct from, because they are anticipated or obvious over, one or more claims of the following patents and applications assigned to Cogmedia:

- U.S. Patent No. 7,640,511;
- U.S. Patent Application No. 11/118,301;
- U.S. Patent No. 8,499,248;
- U.S. Patent Application No. 12/563,416;
- U.S. Patent No. 8,701,018;
- U.S. Patent Application No. 12/793,207;
- U.S. Patent No. 9,185,147;
- U.S. Patent Application No. 12/916,693;
- U.S. Patent No. 9,449,109;
- U.S. Patent Application No. 13/602,458;
- U.S. Patent No. 9,524,090;
- U.S. Patent Application No. 14/664,178;
- U.S. Patent No. 10,338,790;
- U.S. Patent Application No. 16/148,379;
- U.S. Patent Application No. 13/925,031;

- Prov. App. No. 60/566,723; and
- Prov. App. No. 61/116,747.

VIII. IMPROPER INVENTORSHIP

Meta contends that the Asserted Patents are invalid and unenforceable to the extent that the alleged inventors did not invent the purported claimed inventions, and/or to the extent that the actual inventors are not named as inventors on the face of the Asserted Patents.

As discussed above, *see supra* Section III.B.3 (EWall Prior Art Publications, Systems, and/or Knowledge, incorporated herein), the technology of the Asserted Patents was developed in association with the EWall Project years before the filing of the Asserted Patents. However, while the Asserted Patents name only Paul Keel and Jeffrey Huang as inventors, inventors of the pre-dating subject matter of the EWall Project and/or one or more of the EWall Documents include Paul Keel and Jeffrey Huang, but also at least Patrick Winston, William Porter, Edith Ackermann, Mike Kahan, Yao Li, Matt Sither, Benjamin Wang, Raudel Rodriguez and Akshay Patil (“Unnamed Inventors”). See *EWall: Computational Support/or Decision Making in Collaborative Environments*; Sep. 12, 2008 Keel Declaration (App. No. 11_118,301).

The Asserted Patent claims are invalid and unenforceable (1) to the extent that the named inventors (Paul Keel and/or Jeffrey Huang) did not invent the subject matter claimed in the Asserted Patent, and/or (2) to the extent that the actual inventors of the claimed subject matter (such as one or more of the Unnamed Inventors, and/or others at associated with the EWall Project) are not named as inventors in the Asserted Patents.

The foregoing response is based on Meta’s review to date after a reasonable inquiry. Meta reserves the right to further supplement and/or modify this response as fact discovery progresses.

IX. SECONDARY CONSIDERATIONS

Meta contends that there are no secondary considerations of non-obviousness evidencing the validity of any of the asserted claims. Secondary considerations of nonobviousness, or objective indicia of non-obviousness, “can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, awards or other industry praise for the invention, and skepticism of skilled artisans before the invention.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013). “A nexus between the merits of the claimed invention and evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 668 (Fed. Cir. 2000). Moreover, even if a nexus exists, secondary considerations of non-obviousness “simply cannot overcome [a] strong prima facie showing of obviousness.” *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1368 (Fed. Cir. 2008). Cogmedia has not established the existence of any objective indicia of non-obviousness or secondary considerations. Meta reserves the right to supplement their contentions to respond to any such evidence should Cogmedia be permitted to raise them in the future. While discovery in this case is ongoing, and Meta’s investigation continues (which will include expert discovery), to the extent Cogmedia contends that one or more asserted claims is not obvious based on secondary considerations recognized by relevant authority Meta contends such allegations are without merit.

As an initial matter, Cogmedia cannot, and has not, demonstrated any nexus of any purported secondary considerations to the claims. *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1359 (Fed. Cir. 1999) (“The patentee bears the burden of showing that a nexus

exists.”). Indeed, “In order to accord substantial weight to secondary considerations in an obviousness analysis, the evidence of secondary considerations must have a nexus to the claims, i.e., there must be a legally and factually sufficient connection between the evidence and the patented invention.” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019) (internal quotations omitted). Further, Cogmedia cannot establish a presumption of nexus because the claimed inventions are not coextensive with any successful commercial product. A nexus is presumed only when the evidence is tied to a specific product that is essentially the claimed invention as a whole. *See, e.g., Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019). To the extent Cogmedia alleges commercial success of Meta’s products, Meta’s products do not practice the Asserted Patents (*see supra* Section II), and therefore cannot establish a nexus. Further, Meta’s products incorporate thousands, if not thousands, of unclaimed features, including, *inter alia*, sophisticated machine learning algorithms, global ad-delivery systems, and ground-breaking software and hardware products and systems, that materially impact the functionality and drive the success of those products. As another example, the claimed “information object” and/or “card” features, to the extent they are practiced by any Meta product (they are not), are at most a minor component of a vastly more complex and sophisticated system, no presumption of nexus applies. Furthermore, objective evidence lacks a nexus if it relates to features already known in the prior art, which is the case here given the asserted claims of the Asserted Patents are not novel, are obvious, and were well-known and conventional (*see supra* Section IV).

Cogmedia has not identified any evidence of copying of the purported inventions of the asserted claims. Similarly, Cogmedia has provided no evidence of any failure of others to realize any purported inventions of the Asserted Claims, or any evidence of any long felt but unsolved

need solved by the purported inventions of the asserted claims. To the contrary, the widespread knowledge of using collaborating and interacting with networked content is contrary evidence of any long-felt need for the purported inventions of the asserted claims. Mere development of products in the same general field, or implementation of commonplace features for organizing, displaying, linking, sharing, or interacting with content, does not establish copying of the Asserted Patents. Nor would the existence of accused functionality, without more, show that Meta copied a specific claimed feature as opposed to independently implementing concepts already widespread in the prior art. Given the substantial body of prior art identified herein, any allegation of copying is misplaced, and instead represents adoption of known concepts from the prior art rather.

Cogmedia also has not identified any evidence that the purported inventions of the Asserted Claims have enjoyed any commercial success. There is no product practicing the Asserted Claims for which Cogmedia can show sales, market share, customer demand, or any other accepted measure of commercial success tied to the claimed features. To the extent that Cogmedia claims that sales of any accused products constitutes commercial success, such reliance would be legally and factually improper for similar reasons discussed above. Cogmedia has not identified any evidence that consumer demand, if any, was driven by the specific claim limitations rather than by those other factors. Any alleged success of accused products is not evidence that the Asserted Claims are non-obvious, particularly where such products contain numerous non-claimed features and derive value from numerous other sources, brand strength, installed user base, interoperability, advertising and marketing efforts, financial or economic incentives related to the sale or distribution of the accused products, network effects, user experience design, and other unclaimed functionalities. Cogmedia has not identified any

evidence of any nexus between the claimed invention and such alleged commercial success.

Cogmedia also has not provided evidence of unexpected results or unexpected properties in the purported inventions of the asserted claims. As discussed herein, the Asserted Claims generally concern combinations of known computer-implemented functions and user-interface concepts. Any results flowing from such arrangements would have been the predictable consequence of using known computing components and known interface techniques for their ordinary purposes. Cogmedia has identified no contemporaneous testing, technical data, comparative studies, or other evidence showing that the Asserted Claims achieved results that were surprising, superior, or otherwise unexpected relative to the prior art.

Cogmedia has not identified any evidence of industry praise or respect, awards or licensing for the purported inventions of the Asserted Claims. Generalized praise (Meta is unaware of any such evidence here) for software platforms, collaboration tools, social-media features, content sharing, or product design does not demonstrate praise for the claimed inventions themselves. Cogmedia has provided any evidence of licensing, which indicates the industry does not respect or value the Asserted Patents. Likewise, to the extent Cogmedia provides any evidence of licensing, absent proof that any license, partnership, acquisition, or business arrangement was driven by the specific merits of the claimed subject matter—as opposed to litigation cost avoidance, portfolio value, business considerations, or other extrinsic factors—such evidence would have no probative value.

Cogmedia has not identified any evidence of any skepticism of skilled artisans prior to purported inventions of the Asserted Patents or any teaching away from any of the purported inventions Asserted Patents. Rather, and as discussed above, there are multiple references anticipating and/or or rendering obvious the alleged inventions. The prior art identified herein

establishes not only a lack of skepticism but an appreciation that the purported inventions of the Asserted Claims were known to those of skill in the art.

Cogmedia has not identified any evidence of any failed attempts by others to resolve any of the alleged problems that were allegedly solved by any of the alleged inventions claimed in the Asserted Patents. There is no evidence that others tried and failed to achieve the claimed subject matter, much less that the claims solved a persistent technical problem facing POSITAs. To the contrary, the prior art discussed herein demonstrates that others were successfully developing and disclosing systems and concepts the claimed subject matter, including collaborative environments, and user interfaces for interacting with information. The existence of multiple prior-art references directed to the same subject matter is contrary to any suggestion that others had failed.

Cogmedia has not identified any evidence of any long-felt but unresolved need for the alleged inventions claimed in the Asserted Patents. As described above, the Asserted Claims are anticipated and/or rendered obvious by multiple prior art references. To the extent there was ever a need for any of the alleged inventions, they were well known to those in the art, as discussed in Section IV.D.2.

X. DOCUMENT PRODUCTION

Pursuant to Local Rule 16.6(d)(4), Meta is concurrently producing the prior art referenced in these Preliminary Non-Infringement and Invalidity Contentions (including the documents required under Local Rule 16.6(d)(4)(G)), technical documents sufficient to show the operation of the accused products to the extent Meta was able to understand the Preliminary Infringement Contentions (including the documents required under Local Rule 16.6(d)(4)(A), and documents sufficient to identify the real parties-in-interest as required under Local Rule 16.6(d)(4)(H).

Pursuant to Local Rule 1.6.6(d)(4)(B) and (C) and the Protective Order in this action, Meta also makes available for inspection source code for the Accused Products at Paul Hastings LLP, 1117 S. California Avenue, Palo Alto, CA 94304.

Meta reserves the right to supplement these productions with additional documentation, in accordance with the Federal Rules of Civil Procedure, the Local Rules, the Court's orders and other applicable rules and statutes.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on March 18, 2026 the foregoing was served on all counsel of record by e-mail.

By: /s/ Matthias A. Kamber
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